

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

File 2:INSPEC 1969-2002/Mar W2  
(c) 2002 Institution of Electrical Engineers  
File 6:NTIS 1964-2002/Mar W4  
(c) 2002 NTIS, Intl Cpyrght All Rights Res  
File 8:Ei Compendex(R) 1970-2002/Mar W2  
(c) 2002 Engineering Info. Inc.  
File 34:SciSearch(R) Cited Ref Sci 1990-2002/Mar W2  
(c) 2002 Inst for Sci Info  
File 35:Dissertation Abs Online 1861-2002/Mar  
(c) 2002 ProQuest Info&Learning  
File 65:Inside Conferences 1993-2002/Mar W1  
(c) 2002 BLDSC all rts. reserv.  
File 77:Conference Papers Index 1973-2002/Jan  
(c) 2002 Cambridge Sci Abs  
File 94:JICST-EPlus 1985-2002/Jan W4  
(c)2002 Japan Science and Tech Corp(JST)  
File 99:Wilson Appl. Sci & Tech Abs 1983-2002/Jan  
(c) 2002 The HW Wilson Co.  
File 144:Pascal 1973-2002/Mar W2  
(c) 2002 INIST/CNRS  
File 238:Abs. in New Tech & Eng. 1981-2002/Feb  
(c) 2002 Reed-Elsevier (UK) Ltd.  
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec  
(c) 1998 Inst for Sci Info  
File 108:AEROSPACE DATABASE 1962-2001/DEC  
(c) 2002 AIAA  
File 583:Gale Group Globalbase(TM) 1986-2002/Mar 09  
(c) 2002 The Gale Group  
File 248:PIRA 1975-2002Mar W2  
(c) 2002 Pira International  
File 233:Internet & Personal Comp. Abs. 1981-2002/Mar  
(c) 2002 Info. Today Inc.  
File 256:SoftBase:Reviews,Companies&Prods. 85-2002/Feb  
(c)2002 Info.Sources Inc

Set	Items	Description
S1	1955996	(IMAGE?? OR PICTURE?? OR PIXEL?? OR PEL OR PICTURE()ELEMEN- T?? OR PICEL?? OR PIXEL??)
S2	41577	S1 AND ORIGINAL
S3	208260	S1 AND (GENERAT? OR CREAT? OR RENDER?)
S4	0	JUST()IN()FOCUS?
S5	909983	FOCUS?
S6	10353	Z(3N)(BUFFER? OR VALUE?)
S7	3533	OVERWRIT? OR OVER()WRIT?
S8	421	(POSITIONAL OR FARTHER OR NEARER) (3N)DISTANCE?
S9	1129	S6 AND (PREDETERMIN? OR SPECIFIC OR SPECIFIED OR SET OR PR- ESELECT? OR PRESET OR PRE() (SELECT? OR SET OR DETERMIN? OR SE- LECT? OR SPECIFIED))
S10	10286	BLURRED OR BLURRY OR OUT(2N)FOCUS
S11	992	S10 AND LEVEL?
S12	131567	MAGNIF? OR ENLARG?
S13	6606192	REDUC? OR SMALL? OR MINIMI?
S14	1516286	SEQUENTIAL? OR SEQUENCE?
S15	3	S11(3N)S12(3N)LEVEL??
S16	2521690	UNIQUE OR SINGULAR? OR SPECIFIC
S17	44	LINEAR()RATIO
S18	8750	DEPTH(3N)FIELD?
S19	7528	S1 AND INTERPOLAT? AND ALGORITHM?
S20	807	(BILINEAR OR BI()LINEAR?) (3N)FILTER?
S21	3455	CONTROL(3N)DISTANC?
S22	2787	DEPTH(3N)DIRECTION??
S23	43896	AU=(NAKAMURA T? OR NAKAMURA, T? OR CUTHBERT D? OR CUTHBERT, D?)
S24	2	S3 AND S5 AND S6 AND S10
S25	2	RD S24 (unique items)
S26	42	S1 AND S23 AND S5
S27	0	S26 AND S18
S28	0	S26 AND Z

```
S29      1  S26 AND S10
S30     41  S26 NOT S29
S31     33  S30 NOT PY=>2000
S32     27  RD S31 (unique items)
S33      3  S1 AND S13 AND S17
S34      2  RD S33 (unique items)
S35      0  S1 AND S12 AND S13 AND S14 AND S16 AND S19 AND S20
S36      0  S1 AND S12 AND S13 AND S20 AND S21 AND S22
S37      0  S1 AND S20 AND S21 AND S22
S38      2  S1 AND S6 AND S7
S39      2  S38 NOT (S24 OR S29 OR S33)
S40      1  RD S39 (unique items)
```

15/3,K/1 (Item 1 from file: 8)  
 DIALOG(R)File 8:Ei Compendex(R)  
 (c) 2002 Engineering Info. Inc. All rts. reserv.

05894901 E.I. No: EIP01396662965  
**Title: Sharpness preserving image enlargement based on a ramp edge model**  
 Author: Leu, J.-G.  
 Corporate Source: Department of Statistics National Taipei University,  
 Taipei 10433, Taiwan  
 Source: Pattern Recognition v 34 n 10 October. p 1927-1938  
 Publication Year: 2001  
 CODEN: PTNRA8 ISSN: 0031-3203  
 Language: English

...Abstract: from their parameter values. If we keep the ramp width  
 parameter values at the same **level** for the edge pixels in the **enlarged**  
 image, the enlarged edges will be as sharp as the edges in the original.  
 The...

15/3,K/2 (Item 1 from file: 34)  
 DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
 (c) 2002 Inst for Sci Info. All rts. reserv.

09910836 Genuine Article#: 462JP No. References: 16  
**Title: Sharpness preserving image enlargement based on a ramp edge model**  
 Author(s): Leu JG (REPRINT)  
 Corporate Source: Natl Taipei Univ, Dept Stat, 67, Sect 3, Min Sheng E  
 Rd/Taipei 10433//Taiwan/ (REPRINT); Natl Taipei Univ, Dept Stat, Taipei  
 10433//Taiwan/  
 Journal: PATTERN RECOGNITION, 2001, V34, N10 (OCT), P1927-1938  
 ISSN: 0031-3203 Publication date: 20011000  
 Publisher: PERGAMON-ELSEVIER SCIENCE LTD, THE BOULEVARD, LANGFORD LANE,  
 KIDLINGTON, OXFORD OX5 1GB, ENGLAND  
 Language: English Document Type: ARTICLE (ABSTRACT AVAILABLE)

...Abstract: from their parameter values. If we keep the ramp width  
 parameter values at the same **level** for the edge pixels in the  
**enlarged** image, the enlarged edges will be as sharp as the edges in  
 the original. The...

15/3,K/3 (Item 1 from file: 144)  
 DIALOG(R)File 144:Pascal  
 (c) 2002 INIST/CNRS. All rts. reserv.

15339875 PASCAL No.: 02-0026567  
**Sharpness preserving image enlargement based on a ramp edge model**  
 LEU J G  
 Department of Statistics National Taipei University, Taipei 10433, Taiwan  
 Journal: Pattern Recognition, 2001, 34 (10) 1927-1938  
 Language: English

... from their parameter values. If we keep the ramp width parameter  
 values at the same **level** for the edge pixels in the **enlarged** image, the  
 enlarged edges will be as sharp as the edges in the original. The...

25/3,K/1 (Item 1 from file: 2)  
DIALOG(R)File 2:INSPEC  
(c) 2002 Institution of Electrical Engineers. All rts. reserv.

6096535 INSPEC Abstract Number: C9901-6130B-061

**Title: Calibrated computer graphics: a new approach to realistic image synthesis based on camera calibration**

Author(s): Asada, N.; Baba, M.; Amano, A.

Author Affiliation: Dept. of Intelligent Syst., Hiroshima City Univ., Japan

Conference Title: Proceedings. Fourteenth International Conference on Pattern Recognition (Cat. No.98EX170) Part vol.1 p.705-7 vol.1

Editor(s): Jain, A.K.; Venkatesh, S.; Lovell, B.C.

Publisher: IEEE Comput. Soc, Los Alamitos, CA, USA

Publication Date: 1998 Country of Publication: USA 2 vol. xlvii+1867

pp.

ISBN: 0 8186 8512 3 Material Identity Number: XX98-02381

U.S. Copyright Clearance Center Code: 1051-4651/98/\$10.00

Conference Title: Proceedings Fourteenth International Conference on Pattern Recognition

Conference Date: 16-20 Aug. 1998 Conference Location: Brisbane, Qld., Australia

Language: English

Subfile: C

Copyright 1998, IEE

**Title: Calibrated computer graphics: a new approach to realistic image synthesis based on camera calibration**

Abstract: Camera calibration is an important issue not only for real image analysis but also for realistic image synthesis. This paper proposes a new scheme for image synthesis that we call "calibrated computer graphics" and presents a method to synthesize blurred images based on camera parameters obtained by calibrating a real camera. Using the reversed projection blurring model, we have developed the multiple Z - buffer algorithm to generate images of arbitrary focus settings. Experimental verification has demonstrated that the quality of reality of the generated images is as high as that of real images. Finally, we have shown a series of synthesized images that include virtual objects embedded in real images.

...Descriptors: image processing

Identifiers: image synthesis...

... focus settings...

... blurred image generation ; ...

... Z - buffer algorithm

25/3,K/2 (Item 1 from file: 35)  
DIALOG(R)File 35:Dissertation Abs Online  
(c) 2002 ProQuest Info&Learning. All rts. reserv.

01235794 ORDER NO: AADDX-96637

**MULTI-DIMENSIONAL POLYGON-BASED RENDERING FOR MOTION BLUR AND DEPTH OF FIELD**

Author: GOSS, KEITH MICHAEL

Degree: PH.D.

Year: 1991

Corporate Source/Institution: BRUNEL UNIVERSITY (UNITED KINGDOM) (0692)

Source: VOLUME 53/04-B OF DISSERTATION ABSTRACTS INTERNATIONAL.

PAGE 1924. 187 PAGES

**MULTI-DIMENSIONAL POLYGON-BASED RENDERING FOR MOTION BLUR AND DEPTH OF FIELD**

Available from UMI in association with The British Library.

As expectations of computer- **generated images** progress beyond the characteristically over-sharp appearance of traditional **rendering**,

..  
.. attention is increasingly being paid to the incorporation of additional, non-spatial domains into the **rendering** process. Two of these domains are time and the area of a lens. Incorporating the former gives the effect of motion blur, in which objects in motion are **rendered** indistinctly within each frame of an animation sequence; incorporating the latter gives a depth of...

...objects (or parts of objects) both nearer and further than some range of depths appear **out of focus**. Since polygon-based **rendering** is the speediest and most widespread approach in traditional **rendering**, this research investigates its extension to deal with these two effects.

To achieve this extension...

...defined, and techniques for clipping to the view volume, back-face removal and scan-line/ **z - buffer** visible surface determination are extended from 3-d to deal with this. Similarly, this thesis...

...of benefit are deduced, and the wider application of this approach to a range of **rendering** problems is considered.

29/3,K/1 (Item 1 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

02543439 JICST ACCESSION NUMBER: 95A0806196 FILE SEGMENT: JICST-E  
**Rotatostereoradiography: Differences of Resolution of the Images between  
a 0.6mm and a 1mm Focus X-ray Tubes.**

OTTOMO MICHINORI (1); **NAKAMURA TATSUMI** (1); YAMADA HARUYUKI (1); KAWANO  
SEIICHIRO (2); SUGAWARA KO (3); NAKANISHI TAKESHI (4); TANAKA YOSHIMUNE  
(4); FUJIMOTO MASAFUMI (5)

(1) Aomori Rosai Hosp.; (2) Univ. of Occup. and Environ. Health; (3)  
Ishidobyoin; (4) Shimadzu Corp.; (5) Shao

Gazo Shinan(Japanese Journal of Diagnostic Imaging), 1995, VOL.15,NO.9,  
PAGE.1035-1042, FIG.3, REF.15

JOURNAL NUMBER: G0135BAK ISSN NO: 0285-0524

UNIVERSAL DECIMAL CLASSIFICATION: 616.8-07

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

**Rotatostereoradiography: Differences of Resolution of the Images between  
a 0.6mm and a 1mm Focus X-ray Tubes.**

OTTOMO MICHINORI (1); **NAKAMURA TATSUMI** (1); YAMADA HARUYUKI (1)

...ABSTRACT: single injection of contrast medium by rapidly rotating an  
X-ray tube coupled with an **image** intensifier in 1.8 seconds through  
180.DEG.. This study assessed whether it is possible to obtain paused  
**images** which minimize **blurred** vision by showing better resolution  
utilizing a 0.6mm **focus** X-ray tube rather than a 1mm **focus** X-ray  
tube. In the RSRG device, a 1mm **focus** X-ray tube of Circlex  
1P39AK-100AF was replaced with a 0.6mm **focus** X-ray tube of Circlex  
0.6/1 J39CM-200AH on January 16, 1991. As a result, although contrast  
of the **images** was slightly diminished in the **images** obtained under  
a 0.6mm **focus** X-ray tube, resolution of the **images** was improved  
utilizing this tube. Finally, the 0.6mm **focus** X-ray tube gives a  
superior **image** resolution. The X-ray tube may be rotated through  
180.DEG. in 1.8 seconds...

...BROADER DESCRIPTORS: **image** technology

32/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5721958 INSPEC Abstract Number: C9711-6130B-114

**Title:** The object-space parallel processing of the multipass rendering method on the (M pi )/sup 2/ with a distributed-frame buffer system

**Author(s):** Yamauchi, H.; Maeda, T.; Kobayashi, H.; Nakamura, T.

**Author Affiliation:** Dept. of Comput. & Math. Sci., Tohoku Univ., Sendai, Japan

**Journal:** IEICE Transactions on Information and Systems vol.E80-D, no.9 p.909-18

**Publisher:** Inst. Electron. Inf. & Commun. Eng,

**Publication Date:** Sept. 1997 **Country of Publication:** Japan

**CODEN:** ITISEF **ISSN:** 0916-8532

**SICI:** 0916-8532(199709)E80D:9L.909:OSPP;1-A

**Material Identity Number:** P713-97010

**Language:** English

**Subfile:** C

**Copyright** 1997, IEE

**Author(s):** Yamauchi, H.; Maeda, T.; Kobayashi, H.; Nakamura, T.

**Abstract:** The multipass rendering method, based on the global illumination model, can generate the most photorealistic images. However, since the multipass rendering method is very time-consuming, it is impractical in the industrial world. This paper discusses a massively parallel processing approach to fast image synthesis by using the multipass rendering method. In particular, we focus on the performance evaluation of view-dependent object-space parallel processing on the (M pi

...

...Descriptors: realistic images ;

...Identifiers: photorealistic image generation...

...fast image synthesis...

32/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

4956568 INSPEC Abstract Number: C9507-5260B-043

**Title:** Neural network structures for expression recognition

**Author(s):** Ding, J.; Shimamura, M.; Kobayashi, H.; Nakamura, T.

**Author Affiliation:** Dept. of Comput. & Math. Sci., Tohoku Univ., Sendai, Japan

**Part** vol.2 **p.**1430-3 **vol.**2

**Publisher:** IEEE, New York, NY, USA

**Publication Date:** 1993 **Country of Publication:** USA 3 vol. xxxxiv+3061

pp.

**ISBN:** 0 7803 1421 2

**Conference Title:** Proceedings of 1993 International Conference on Neural Networks (IJCNN-93-Nagoya, Japan)

**Conference Sponsor:** Japanese Neural Network Soc.; IEEE Neural Networks Council; Int. Neural Network Soc.; European Neural Network Soc.; Soc. Instrum. & Control Eng.; IEICE

**Conference Date:** 25-29 Oct. 1993 **Conference Location:** Nagoya, Japan

**Language:** English

**Subfile:** C

**Copyright** 1995, IEE

**Author(s):** Ding, J.; Shimamura, M.; Kobayashi, H.; Nakamura, T.

...Abstract: up expression features models and then apply them to the network structures for expression recognition, focusing on how to determine the number of hidden nodes and initialize the weights. Moreover, the...

...Descriptors: image recognition



32/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

4593199 INSPEC Abstract Number: B9403-7230G-030, C9403-5530-008

**Title: Multi-chip direct contact-type image sensor using bipolar IC**

Author(s): Nakamura, T. ; Tanaka, E.; Murata, T.; Yamaguchi, K.; Fujiwara, S.

Author Affiliation: Matsushita Electr. Ind. Co. Ltd., Osaka, Japan

Journal: Journal of the Institute of Television Engineers of Japan  
vol.47, no.9 p.1168-76

Publication Date: Sept. 1993 Country of Publication: Japan

CODEN: JITJA7 ISSN: 0386-6831

Language: Japanese

Subfile: B C

**Title: Multi-chip direct contact-type image sensor using bipolar IC**

Author(s): Nakamura, T. ; Tanaka, E.; Murata, T.; Yamaguchi, K.; Fujiwara, S.

...Abstract: have been developed. In addition, two types of multi-chip direct contact-type bipolar IC **image** sensors have been developed for graphic **image** scanners used in office equipment such as facsimiles, intelligent photocopiers and computers. This is the...

... above bonding methods and optical plates have been used in this kind of application. These **image** sensors achieve compact size, light weight and high reading performance (MTF-value 65%, **focus** -depth 0.3 mm).

...Descriptors: **image** scanners...

... **image** sensors

...Identifiers: multi-chip direct contact-type bipolar IC **image** sensors

...

...graphic **image** scanners...

32/3,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

03674836 INSPEC Abstract Number: A90097468, B90052148

**Title: A CCD camera system for observations of the small bodies of the solar system**

Author(s): Yamazaki, T.; Nakamura, T. ; Watanabe, J.; Kinoshita, H.; Kimura, Y.

Journal: Report of the National Astronomical Observatory of Japan  
vol.1, no.1 p.51-9

Publication Date: Feb. 1990 Country of Publication: Japan

ISSN: 0915-6321

Language: Japanese

Subfile: A B

Author(s): Yamazaki, T.; Nakamura, T. ; Watanabe, J.; Kinoshita, H.; Kimura, Y.

...Abstract: observations of the small bodies of the solar system and the relevant software of the **image** data handling is developed. In order to follow moving objects efficiently, the camera system is designed to be set up at any position angle at the **focus**. The basic performance of the CCD is examined with emphasis on the so-called hot- **pixel** statistics.

...Descriptors: CCD **image** sensors...

...computerised **picture** processing...

...Identifiers: **image** data handling...

...hot- **pixel** statistics

32/3,K/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

02949771 INSPEC Abstract Number: B87056359, C87050177

**Title: CCD micro-miniature color camera**

Author(s): Takemura, Y.; Kimura, M.; Ooi, K.; Mukaigawa, H.; Nakamura, T.; Tanuma, C.; Sanda, K.; Amano, M.

Author Affiliation: Toshiba Corp., Yokohama, Japan

Journal: IEEE Transactions on Consumer Electronics vol.CE-33, no.2

p.85-9

Publication Date: May 1987 Country of Publication: USA

CODEN: ITCEDA ISSN: 0098-3063

U.S. Copyright Clearance Center Code: 0098-3063/87/0500-0085\$01.00

Language: English

Subfile: B C

Author(s): Takemura, Y.; Kimura, M.; Ooi, K.; Mukaigawa, H.; Nakamura, T.; Tanuma, C.; Sanda, K.; Amano, M.

...Abstract: color camera system with an extremely small camera head utilizing a CCD (computer-controlled display) **image** sensor is described. The camera system consists of a camera head unit with a camera...

...in diameter and 53 mm in length) incorporates a small, wide-angle 7.5 mm **focus** lens, a 200000 **picture element** CCD **image** sensor with color filter array and compact electronic circuits. The design, specifications and applications of...

Descriptors: CCD **image** sensors...

...Identifiers: CCD **image** sensor...

...200000 **pixel**

32/3,K/6 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

02102927 INSPEC Abstract Number: A83090746

**Title: Multiple beam lattice imaging of hexagonal ferrites**

Author(s): Hirotsu, Y.; Nakamura, Y.; Mizutani, J.; Nagakura, S.; Nakamura, T.

Author Affiliation: Technol. Univ. of Nagaoka, Nagaoka, Japan

Journal: Transactions of the Japan Institute of Metals vol.24, no.6

p.461-9

Publication Date: June 1983 Country of Publication: Japan

CODEN: TJIMAA ISSN: 0021-4434

Language: English

Subfile: A

Author(s): Hirotsu, Y.; Nakamura, Y.; Mizutani, J.; Nagakura, S.; Nakamura, T.

...Abstract: positions in hexagonal ferrites. It was shown that under the condition of nearly fixed under- **focus** barium atom positions are visible as bright spots in a relatively wide range of crystal...

... analysis of the compositional faults introduced in the M compound. The origin of the interpretable **images** with the bright spot contrasts was discussed on the basis of the dynamical effect of...

...Identifiers: nearly fixed under- **focus** ; ...

...interpretable **images** ;

32/3,K/7 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

(c) 2002 NTIS, Intl Cpyrght All Rights Res. All rts. reserv.

1638591 NTIS Accession Number: DE92713849

**Proceedings of the fourth workshop on elementary-particle picture of the universe**

Hikasa, K. ; Nakamura, T. ; Ohshima, T. ; Suzuki, A.  
National Lab. for High Energy Physics, Oho (Japan).

Corp. Source Codes: 065071000; 9307380

Report No.: KEK-PR-90-1

1990 285p

Languages: English Document Type: Conference proceeding

Journal Announcement: GRAI9211; NSA1600

Workshop on elementary-particle picture of the universe (4th), Tateyama (Japan), 22-25 Nov 1989.

U.S. Sales Only. Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A13/MF A03

# **Proceedings of the fourth workshop on elementary-particle picture of the universe**

Hikasa, K. ; Nakamura, T. ; Ohshima, T. ; Suzuki, A.

The Fourth Workshop on Elementary-Particle **Picture** of the Universe was held at Tateyama National Rest House from November 22 to 25, 1989. The main purpose of this workshop **focuses** on most of current experimental and theoretical activities in non-accelerator particle physics and astrophysics  
...

32/3,K/8 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

04474018 JICST ACCESSION NUMBER: 99A0839666 FILE SEGMENT: JICST-E

## **Utilization situations of CCTV by low vision persons and improvement requirements.**

OKADA SHIN'ICHI (1); SAKAJIRI MASATSUGU (1); AOKI NARUMI (2); OKURA MOTOHIRO (3); KITABAYASHI HIROSHI (4); KUME YUICHIRO (5); NAKADOMARI SATOSHI (6); WATANABE BUNJI (6); **NAKAMURA TETSUO** (7)

(1) Shogaishashokugyosogose; (2) Miyagi Univ. of Educ.; (3) Seikei Univ. ; (4)Nihonmojinshokunokaihatsuse; (5) Tokyo Inst. of Polytech.; (6) Kanagawa Rehabilitation Center; (7) Kyushu Univ. Nursing and Social Welfare, JPN

Kankaku Daiko Shinpojiumu, 1998, VOL.24th, PAGE.69-72, TBL.8, REF.1

JOURNAL NUMBER: L1165AAC

UNIVERSAL DECIMAL CLASSIFICATION: 616/618-76/78

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Short Communication

MEDIA TYPE: Printed Publication

; **NAKAMURA TETSUO** (7)

...DESCRIPTORS: color **image** ; ...

... **focusing** (adjustment

...BROADER DESCRIPTORS: **image** ;

32/3,K/9 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

04433668 JICST ACCESSION NUMBER: 99A1046291 FILE SEGMENT: JICST-E

## **A ROS-System with a 2-Dimensional Surface-Emitting Laser Array as the Light Source.**

IWASA IZUMI (1); ASHIKAGA HIDEAKI (1); SAKAMOTO AKIRA (1); **NAKAMURA TAKESHI** (1); YAMAMOTO MASATERU (1)

(1) Fuji Xerox Co., Ltd., Gen. Res. Labs.

Japan Hardcopy Ronbunshu(Japan Hardcopy), 1999, VOL.1999, PAGE.149-152,

FIG.4, TBL.1, REF.2

JOURNAL NUMBER: L0935AAS ISSN NO: 0916-8087

UNIVERSAL DECIMAL CLASSIFICATION: 772/773

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Conference Proceeding  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

IWASA IZUMI (1); ASHIKAGA HIDEAKI (1); SAKAMOTO AKIRA (1); NAKAMURA  
TAKESHI (1); YAMAMOTO MASATERU (1)  
...DESCRIPTORS: pixel ; ...

... focusing (light  
...BROADER DESCRIPTORS: image ; ...  
... focusing ;

32/3,K/10 (Item 3 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

04427817 JICST ACCESSION NUMBER: 99A0923369 FILE SEGMENT: JICST-E  
Diagnosis of Endoscopic Ultrasonography for Early Gastric Cancer.  
Assessment of the Depth of Invasion of Gastric Carcinoma by Endoscopic  
Ultrasonography(EUS) Focused on Peptic Ulceration within Cancerous  
Areas.

NAKAMURA TSUNEYA (1); SUZUKI TAKASHI (1); MATSUURA AKIRA (1); OHASHI  
KAZUHIKO (1)  
(1) Aichi Cancer Center  
I to Cho(Stomach and Intestine), 1999, VOL.34,NO.9, PAGE.1105-1117, FIG.4,  
TBL.7, REF.10  
JOURNAL NUMBER: Z0369AAH ISSN NO: 0536-2180  
UNIVERSAL DECIMAL CLASSIFICATION: 616.3-006 616-006-07  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

...Gastric Cancer. Assessment of the Depth of Invasion of Gastric Carcinoma  
by Endoscopic Ultrasonography(EUS) Focused on Peptic Ulceration  
within Cancerous Areas.  
NAKAMURA TSUNEYA (1); SUZUKI TAKASHI (1); MATSUURA AKIRA (1); OHASHI  
KAZUHIKO (1)  
...BROADER DESCRIPTORS: image technology

32/3,K/11 (Item 4 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

04024022 JICST ACCESSION NUMBER: 99A0287261 FILE SEGMENT: JICST-E  
Electronic Endoscopy for the Diagnosis of Early Gastric Carcinoma.  
Diagnostic Principles of Electronic Endoscopy Focusing on Flat or  
Depressed Early Gastric Cancer, in Contrast with the Features or X-ray  
Diagnosis.

HOSOI TOZO (1); OKADA TOSHIKUNI (1); YAMADA KOZO (1); NAKAI TEIKO (1);  
NAKAMURA TAKASHI (1); IRIGUCHI YOUSUKE (1); HIRATSUKA SHIN (1); SEKITA  
YOSHIHISA (1); YAMAMURA AKIHIKO (1)  
(1) Tamagankenshinse  
Shokaki Naishikyo(Endoscopia Digestiva), 1999, VOL.11,NO.2, PAGE.161-176,  
FIG.17  
JOURNAL NUMBER: L2208AAV ISSN NO: 0915-3217  
UNIVERSAL DECIMAL CLASSIFICATION: 616-006-07 616.3-006  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

Electronic Endoscopy for the Diagnosis of Early Gastric Carcinoma.  
Diagnostic Principles of Electronic Endoscopy Focusing on Flat or  
Depressed Early Gastric Cancer, in Contrast with the Features or X-ray  
...

HOSOI TOZO (1); OKADA TOSHIKUNI (1); YAMADA KOZO (1); NAKAI TEIKO (1);  
NAKAMURA TAKASHI (1); IRIGUCHI YOUSUKE (1); HIRATSUKA SHIN (1); SEKITA  
YOSHIHISA (1); YAMAMURA AKIHIKO (1)  
...BROADER DESCRIPTORS: **image** technology

32/3,K/12 (Item 5 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

03649330 JICST ACCESSION NUMBER: 98A0702116 FILE SEGMENT: JICST-E  
**Application of MR to Virgin Fields of the Dento-Maxillofacial Region.**

NAKAMURA TAKASHI (1); IZUMI MASAHIRO (1)  
(1) Nagasaki Univ., Sch. of Dent.  
Shika Hoshasen(Dental Radiology), 1998, VOL.38,NO.2, PAGE.87-91, REF.21  
JOURNAL NUMBER: Z0608BAI ISSN NO: 0389-9705  
UNIVERSAL DECIMAL CLASSIFICATION: 616.31-07  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

NAKAMURA TAKASHI (1); IZUMI MASAHIRO (1)  
...ABSTRACT: Here, we introduce such hidden aspects of MR in the diagnostic  
radiology, with placing special **focus** on the salivary and lacrimal  
glands, mandibular bone marrow, and peripheral blood vessels of the...  
BROADER DESCRIPTORS: **image** technology...

32/3,K/13 (Item 6 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

03390973 JICST ACCESSION NUMBER: 97A0898678 FILE SEGMENT: JICST-E  
**Architectures, Algorithms and Networks for Massively Parallel Computing.**

**The Object-Space Parallel Processing of the Multipass Rendering Method  
on the (M.PI.)2 with a Distributed-Frame Buffer System.**  
YAMAUCHI H (1); MAEDA T (1); KOBAYASHI H (1); NAKAMURA T (1)  
(1) Tohoku Univ., Sendai-shi, JPN  
IEICE Trans Inf Syst(Inst Electron Inf Commun Eng), 1997, VOL.E80-D,NO.9,  
PAGE.909-918, FIG.9, TBL.3, REF.22  
JOURNAL NUMBER: L1371AAJ ISSN NO: 0916-8532  
UNIVERSAL DECIMAL CLASSIFICATION: 681.3:621.397.3  
LANGUAGE: English COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

YAMAUCHI H (1); MAEDA T (1); KOBAYASHI H (1); NAKAMURA T (1)  
...ABSTRACT: multipass rendering method based on the global illumination  
model can generate the most photo-realistic **images**. However, since  
the multipass rendering method is very time consuming, it is  
impractical in the industrial world. This paper discusses a massively  
parallel processing approach to fast **image** synthesis by the multipass  
rendering method. Especially, we **focus** on the performance evaluation  
of the view-dependent object-space parallel processing on the (M...  
DESCRIPTORS: **image** synthesis...

... **image** memory  
BROADER DESCRIPTORS: **image** processing...

32/3,K/14 (Item 7 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

02716914 JICST ACCESSION NUMBER: 96A0081435 FILE SEGMENT: JICST-E  
**All About "EASY EYE" Visual Aid for Low Vision.**

FUKASAWA SHIGERU (1); **NAKAMURA TETSUO** (1); NAGAOKA YUICHI (1); KOMORI  
AKIRA (1)  
(1) Tokyotoshitsuishakoseikan  
Kankaku Daiko Shinpojiumu, 1995, VOL.21st, PAGE.87-90, FIG.1, TBL.1, REF.3  
JOURNAL NUMBER: L1165AAC  
UNIVERSAL DECIMAL CLASSIFICATION: 616/618-76/78  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Short Communication  
MEDIA TYPE: Printed Publication

FUKASAWA SHIGERU (1); **NAKAMURA TETSUO** (1); NAGAOKA YUICHI (1); KOMORI  
AKIRA (1)  
...DESCRIPTORS: **focusing** (adjustment...

... **image** quality  
...BROADER DESCRIPTORS: **image** characteristic

32/3,K/15 (Item 8 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

02603606 JICST ACCESSION NUMBER: 95A0489726 FILE SEGMENT: JICST-E  
**Technological trends of intelligent sensor devices.**  
**NAKAMURA TETSURO** (1); MURAKAWA SHIN'ICHI (2); YAMAUCHI SHIGERU (3);  
MAENAKA ICHISUKE (4); YAMAMOTO TATSUO (5); ADACHI HIROSHI (6); YOSHIDA  
HIROMICHI (7); IKEDA KYOICHI (8); MUTO KATSUTOSHI (9)  
(1) Toyohashi Univ. of Technol.; (2) Mitsubishi Heavy Ind., Ltd.; (3)  
National Rehabilitation Center for Disabled; (4)Himeji Inst. of  
Technol.; (5) Ishinomaki Senshu Daigaku; (6) Muroran Inst. of Technol.  
; (7) Tokyo Metrop. Ind. Technol. Center; (8) Yokogawa Electr. Corp.; (9)  
Mitsubishi Electr. Corp.  
Denki Gakkai Gijutsu Hokoku, 1995, NO.540, PAGE.79P, FIG.87, TBL.15,  
REF.210  
JOURNAL NUMBER: S0378AAY ISSN NO: 0919-9195  
UNIVERSAL DECIMAL CLASSIFICATION: 53.084  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

**NAKAMURA TETSURO** (1)  
ABSTRACT: This paper summarizes the results of the wide survey and  
research, **focusing** on the device and its technology for integration  
and enhancing intelligence, which are making micromachining...  
...DESCRIPTORS: **image** sensor  
...BROADER DESCRIPTORS: **image** pickup apparatus

32/3,K/16 (Item 9 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

01990131 JICST ACCESSION NUMBER: 94A0374778 FILE SEGMENT: JICST-E  
**A Study of Image Transmission method using Priority Fixation area.**  
MIYASAKA HAJIME (1); **NAKAMURA TAICHI** (1); SUGANO MASATAKA (1)  
(1) NTTDetatsushin  
Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report  
(Institute of Electronics, Information and Communication Engineers),  
1994, VOL.93,NO.517(IE93 129-135), PAGE.9-16, FIG.12, REF.8  
JOURNAL NUMBER: S0532BBG  
UNIVERSAL DECIMAL CLASSIFICATION: 621.397+654.197 681.3:621.397.3  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

**A Study of Image Transmission method using Priority Fixation area.**

MIYASAKA HAJIME (1); NAKAMURA TAICHI (1); SUGANO MASATAKA (1)

ABSTRACT: Delivery of images is expected to be a major aspect of Multimedia information service. Because images use vast amount of data, long transmission time and higher network cost are serious technical problems that need addressing when we systemize image delivery services. Since human's vision system focuses on only a limit region of an image, we propose an image handling method that utilizes such visual characteristics. This method samples the image non-linearly, high density sampling in concentrated area (fixation area) and sparsely in remaining areas. By using this method, the user can grab most of target in early stage of image transmission because this method allocates most of capacity to the fixation area. In this paper...

DESCRIPTORS: picture communication...

... pixel ; ...

... image reproduction

...BROADER DESCRIPTORS: image ; ...

... image processing

32/3,K/17 (Item 10 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

01893217 JICST ACCESSION NUMBER: 93A0863848 FILE SEGMENT: JICST-E

**Linear Image Sensors. Multi-Chip Direct Contact-Type Image Sensor using Bipolar IC.**

NAKAMURA TETSURO (1); TANAKA EIICHIRO (1); MURATA TAKAHIKO (1); YAMAGUCHI KAZUFUMI (1); FUJIWARA SHINJI (1)

(1) Matsushitadenkisingyo Johokikiken

Terebijon Gakkaishi(Journal of the Institute of Television Engineers of Japan), 1993, VOL.47,NO.9, PAGE.1168-1176, FIG.15, TBL.3, REF.21

JOURNAL NUMBER: F0330ABG ISSN NO: 0386-6831

UNIVERSAL DECIMAL CLASSIFICATION: 621.397.61

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

**Linear Image Sensors. Multi-Chip Direct Contact-Type Image Sensor using Bipolar IC.**

NAKAMURA TETSURO (1); TANAKA EIICHIRO (1); MURATA TAKAHIKO (1); YAMAGUCHI KAZUFUMI (1); FUJIWARA SHINJI (1)

...ABSTRACT: have been developed. In addition, two types of multi-chip direct contact-type bipolar IC image sensors have been developed for graphic image scanners used in office equipment such as facsimiles, intelligent photo copy equipment and computers. This...

...above bonding methods and optical plates have been used in this kind of application. These image sensors achieve compact size, light weight and high reading performance(MTF-value 65%, Focus -depth 0.3mm). (author abst.)

...DESCRIPTORS: image sensor

...BROADER DESCRIPTORS: image pickup apparatus

32/3,K/18 (Item 11 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

01432457 JICST ACCESSION NUMBER: 91A0887085 FILE SEGMENT: JICST-E

**Intraarterial therapy with smancs/lpd and subsequent partial hepatectomy in patient with postoperation of renal cell carcinoma.**

KURITA MAKOTO (1); NAKAMURA TOSHIYUKI (1); KATO NOBUO (1); SUZUKI HIDEO

(1); SUZUKI KAZUHIRO (2); KOBAYASHI MIKIO (2)  
(1) Tatebayashi Kosei Hospital; (2) Gunma Univ., School of Medicine  
Rinsho Hinyokika(Japanese Journal of Clinical Urology), 1991, VOL.45,NO.11  
, PAGE.861-863, FIG.3, REF.9  
JOURNAL NUMBER: Z0347BAM ISSN NO: 0385-2393  
UNIVERSAL DECIMAL CLASSIFICATION: 616.36-006 616.6-006  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

KURITA MAKOTO (1); NAKAMURA TOSHIYUKI (1); KATO NOBUO (1); SUZUKI HIDEO  
(1)  
...ABSTRACT: intraarterial administration of SMANCS/LPD to hepatic artery  
was performed two times, the new metastatic **focus** was not observed and  
the partial hepatectomy was performed. Pathological finding showed the  
complete tumor...  
...BROADER DESCRIPTORS: **image** technology

32/3,K/19 (Item 12 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

01242619 JICST ACCESSION NUMBER: 91A0174586 FILE SEGMENT: JICST-E  
**An electron microscopic study of multilamellar bodies in bone forming  
cells. (Part 2): in vitro study.**  
TAKAHASHI TSUNEO (1); NAKAMURA TAKATSUNE (1); TERAUCHI YOJI (1);  
TAKAHASHI KAZUTO (1); TATSUMI JUN'ICHI (2); IKEDA KATSUMI (2); UEDA  
SHINTARO (3)  
(1) Kanagawa Dental College; (2) Meikaidai Shi; (3) Nihon Univ., School of  
Medicine  
Nippon Kaimen Igakkai Zasshi(Journal of Japanese Medical Society for  
Biological Interface), 1990, VOL.21,NO.1/2, PAGE.46-56, FIG.12, REF.12  
JOURNAL NUMBER: Y0152AAE ISSN NO: 0288-8262  
UNIVERSAL DECIMAL CLASSIFICATION: 591.177.05+591.471 57.086.2/.3  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

TAKAHASHI TSUNEO (1); NAKAMURA TAKATSUNE (1); TERAUCHI YOJI (1);  
TAKAHASHI KAZUTO (1)  
...ABSTRACT: 5% potassium ferrocyanide reduced 1% osmium tetroxide  
postfixation. The ultrastructure of the osteoblasts was investigated,  
**focusing** especially on the lamellar structures. Intracellular and  
extracellular multilamellar bodies(MLBs) composing of regular dark...  
...DESCRIPTORS: **picture** enhancement  
...BROADER DESCRIPTORS: **image** processing

32/3,K/20 (Item 13 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

01206574 JICST ACCESSION NUMBER: 90A0927062 FILE SEGMENT: JICST-E  
**Development of a beam measuring system.**  
KOBAYASHI HITOSHI (1); URANO TAKAO (1); OSAWA SATOSHI (1); NAKAMURA  
TAKASHI (1); HOSONO YONEICHI (2); OHASHI HIROTADA (2); YOSHIDA YOICHI  
(2); HANEJIMA RYOICHI (2); UEDA TOORU (2)  
(1) National Lab. for High Energy Physics; (2) Univ. of Tokyo, Nuclear  
Engineering Res. Lab.  
UTNL,R. Tokyo Daigaku Kogakubu Fuzoku Genshiryoku Kogaku Kenkyu Shisetsu,  
1990, NO.252(1989), PAGE.38-39, FIG.1, REF.1  
JOURNAL NUMBER: G0213BAJ  
UNIVERSAL DECIMAL CLASSIFICATION: 621.384.64/.65  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Technical Report



ARTICLE TYPE: Short Communication  
MEDIA TYPE: Printed Publication

KOBAYASHI HITOSHI (1); URANO TAKAO (1); OSAWA SATOSHI (1); **NAKAMURA TAKASHI** (1)  
...DESCRIPTORS: beam **focusing** ; ...

... **image** processing  
...BROADER DESCRIPTORS: **focusing** ;

**32/3,K/21** (Item 14 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

00660688 JICST ACCESSION NUMBER: 88A0445423 FILE SEGMENT: JICST-E  
**XP-100 and its technology.**  
YOSHINO MASAKI (1); YAMAZAKI YOSHIO (1); OHASHI KOHJI (1); **NAKAMURA TEIZOU**  
(1); NOGAMI YUTAKA (1); YAKABE YUTAKA (1); KAGEYAMA TOSHIKAZU (1)  
(1) Fuji Xerox Co., Ltd.  
Fuji Xerox Tech Rep, 1988, NO.3, PAGE.82-88, FIG.11, TBL.2, REF.1  
JOURNAL NUMBER: X0247AAU ISSN NO: 0912-0424  
UNIVERSAL DECIMAL CLASSIFICATION: 771.3/.4  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Commentary  
MEDIA TYPE: Printed Publication

YOSHINO MASAKI (1); YAMAZAKI YOSHIO (1); OHASHI KOHJI (1); **NAKAMURA TEIZOU**  
(1); NOGAMI YUTAKA (1); YAKABE YUTAKA (1); KAGEYAMA TOSHIKAZU (1)  
...ABSTRACT: cost, compactness and power consumption of 100V/15A. The new  
retention method uses a toner **image** on the photoreceptor as an **image**  
signal although conventional methods use an electrostatic **image** as  
an **image** signal. We call the new technology Xero Lithography  
Technology(XLT). In this report, we will describ the new technologies  
in the Xeroprinter 100 with the **focus** on the XLT.(author abst.)  
...DESCRIPTORS: **image** ;

**32/3,K/22** (Item 15 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

00604402 JICST ACCESSION NUMBER: 88A0321362 FILE SEGMENT: JICST-E  
**Neoplastic angioendotheliomatosis. Report of two autopsy cases with special  
reference to the origin of atypical cells.**  
**NAKAMURA T** (1); WATANABE M (1); HOTCHI M (1); FUJIMORI N (2); MIZUNO M  
(3)  
(1) Shinshu Univ.; (2) Iida City Hospital; (3) Showa Inan General Hospital  
Acta Pathol Jpn, 1987, VOL.37,NO.8, PAGE.1337-1346, FIG.10, REF.31  
JOURNAL NUMBER: Z0747AAV ISSN NO: 0001-6632  
UNIVERSAL DECIMAL CLASSIFICATION: 616.12-006  
LANGUAGE: English COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

**NAKAMURA T** (1); WATANABE M (1); HOTCHI M (1)  
...ABSTRACT: widespread demyelination of the spinal cord. There were no  
distinct lesions suggestive of a primary **focus** . In both cases only a  
few atypical cells were immunohistochemically positive for factor  
VIII-related...  
...BROADER DESCRIPTORS: **image** technology

**32/3,K/23** (Item 16 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
(c)2002 Japan Science and Tech Corp(JST). All rts. reserv.

00259251 JICST ACCESSION NUMBER: 86A0321240 FILE SEGMENT: JICST-E

An active scanning method using laser for image analysis and its application to detection of latent fingerprints.

TAKAHASHI KUNIO (1); NAKAMURA TOKIHISA (1); SUZUKI MEGUMU (2); ISHIMORI MICHIIRO (3)

(1) Kisarazu Technical College; (2) Nippon Steel Corp.; (3) Nittetsudensetsukogyo

Kisarazu Kogyo Koto Senmon Gakko Kiyo (Bulletin of Kisarazu Technical College), 1986, NO.19, PAGE.89-95, FIG.14, REF.10

JOURNAL NUMBER: S0774AAI ISSN NO: 0285-7901

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:621.397.3 621.375.826.06

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

An active scanning method using laser for image analysis and its application to detection of latent fingerprints.

TAKAHASHI KUNIO (1); NAKAMURA TOKIHISA (1)

ABSTRACT: An image-processing equipment incorporating a laser-scanning system for image analysis is fabricated to study a fluorescence pattern from a crystal surface. The equipment is...

...DESCRIPTORS: beam focusing ; ...

... image processing

...BROADER DESCRIPTORS: focusing ;

32/3,K/24 (Item 1 from file: 144)

DIALOG(R)File 144:Pascal

(c) 2002 INIST/CNRS. All rts. reserv.

13367882 PASCAL No.: 97-0553276

Development of optical noncontact sensor for measurement of three-dimensional profiles using depolarized components of scattered light

MASHIMO Kanji; NAKAMURA Tetsuya ; TANIMURA Yoshihisa

Gunma Prefectural Industrial Technology Research Laboratory 190

Toriba-machi Maebashi, Gunma 371, Japan

mashimo@consult.tec-lab.pref.gunma.jp; National Research Laboratory of Metrology 1-1-4 Umezono Tsukuba, Ibaraki 305, Japan

Journal: Optical engineering, 1997-01, 36 (1) 227-234

Language: English

Copyright (c) 1997 American Institute of Physics. All rights reserved.

MASHIMO Kanji; NAKAMURA Tetsuya ; TANIMURA Yoshihisa

...resolution and high-resolution optical systems. Two linearly polarized laser beams from the sensor are focused on the object surface to be measured. Some of the depolarized components of light scattered...

... optical system, which can be used to detect a wide range of height. The astigmatic focus error method is applied to the high-resolution optical system to detect the focused positioning signal of the object surface more precisely than with the low-resolution system. Using...

...Instrumentation Engineers. Key words: three-dimensional profile; optical noncontact measurement; linearly polarized light; depolarization; astigmatic focus error; triangulation; free-form surface.

English Descriptors: Instrumentation; Measuring methods; Image sensors; Measurement by laser beam; Polarization; Light scattering

French Descriptors: 4279P; 0630B; Appareillage; Methode mesure; Capteur image ; Mesure par faisceau laser; Polarisation; Diffusion lumiere

32/3,K/25 (Item 2 from file: 144)

DIALOG(R)File 144:Pascal  
(c) 2002 INIST/CNRS. All rts. reserv.

13329111 PASCAL No.: 98-0054619

**Object-space parallel processing of the multipass rendering method on the (M&pg;r;) SUP 2 with a distributed-frame buffer system**

YAMAUCHI H; MAEDA T; KOBAYASHI H; NAKAMURA T

Tohoku Univ, Sendai-shi, Japan

Journal: IEICE Transactions on Information and Systems, 1997, v E80-D (9)  
909-918

Language: English

YAMAUCHI H; MAEDA T; KOBAYASHI H; NAKAMURA T

... multipass rendering method based on the global illumination model can generate the most photo-realistic **images**. However, since the multipass rendering method is very time consuming, it is impractical in the industrial world. This paper discusses a massively parallel processing approach to fast **image** synthesis by the multipass rendering method. Especially, we **focus** on the performance evaluation of the view-dependent object-space parallel processing on the (M...

...English Descriptors: space parallel processing; Multipass rendering method; Distributed frame buffer system; Global illumination model; Ray tracing; **Image** synthesis; Interreflection mechanism; Radiosity; Reviews; Imaging techniques; Buffer storage; Performance; Computer simulation; Efficiency; Algorithms; Distributed...

32/3,K/26 (Item 1 from file: 248)

DIALOG(R)File 248:PIRA

(c) 2002 Pira International. All rts. reserv.

00415250 Pira Acc. Num.: 20035692

**Title: AN ANALYSIS OF VOID OF IMAGE IN ROLLER TRANSFER SYSTEM**

Authors: Ishikawa M; Hashizume H; Satoh K; Nakamura T ; Okano Y; Hosaka Y

Source: Advances in Non-Impact Technologies: Japan Hardcopy '93, Yokohama, Japan, 4-8 Oct. 1993, pp 141-144 [Springfield, VA, USA: Society for Imaging Science and Technology, 1993, 699pp, \$100.00 (ISBN 0-89208-172-4) (655.39) (10571)

Publication Year: 1993

Document Type: Conference Publication

Language: English

**Title: AN ANALYSIS OF VOID OF IMAGE IN ROLLER TRANSFER SYSTEM**

Authors: Ishikawa M; Hashizume H; Satoh K; Nakamura T ; Okano Y; Hosaka Y

...Abstract: problem associated with roller transfer, however, is the occurrence of voids (toner shortages within the **image**). Previous work suggests that adhesive forces may play a part in the development of voids. This paper **focuses** on the lubricant as an internal additive in the toner which has a influence on the adhesive forces. The study enabled a substantial increase in **image** quality to be achieved. (7 fig, 7 ref)

...Descriptors: **IMAGE** QUALITY

32/3,K/27 (Item 2 from file: 248)

DIALOG(R)File 248:PIRA

(c) 2002 Pira International. All rts. reserv.

00295193 Pira Acc. Num.: 41402059

**Title: USES AND MANUFACTURE OF FRESNEL LENSES**

Authors: Nakamura T

Source: Int. J. Sol. Energy 8 , (4), 221-26

Publication Year: 1990

Document Type: Journal Article

Language: English

Authors: Nakamura T

...Abstract: the vision lens included in twin-lens reflex cameras, as it permitted clarity of the **image** right into the four corners of the field of view. The development of the single...

... led to a great expansion in the use of Fresnel lenses in the viewfinder and **focusing** area, and these lenses are also employed in larger cameras, such as the 4 x...

34/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

7178303 INSPEC Abstract Number: A2002-06-4230-029, B2002-03-6135-331,  
C2002-03-5260B-438

**Title: Denoising of ultrasound sector scans by nonlinear filtering of a morphological and linear ratio pyramid**

Author(s): Metzler, V.; Puls, M.; Aach, T.

Author Affiliation: Inst. for Signal Process., Med. Univ. of Lubeck, Germany

Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.4322, pt.1-3 p.480-91

Publisher: SPIE-Int. Soc. Opt. Eng,

Publication Date: 2001 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

SICI: 0277-786X(2001)4322:1/3L.480:DUSS;1-F

Material Identity Number: C574-2001-256

U.S. Copyright Clearance Center Code: 0277-786X/01/\$15.00

Conference Title: Medical Imaging 2001: Image Processing

Conference Sponsor: SPIE

Conference Date: 19-22 Feb. 2001 Conference Location: San Diego, CA, USA

Language: English

Subfile: A B C

Copyright 2002, IEE

**Title: Denoising of ultrasound sector scans by nonlinear filtering of a morphological and linear ratio pyramid**

Abstract: The quality of ultrasound **images** is limited due to granular speckle noise. The presented despeckle algorithm compensates the depth-dependent...

... its performance is compared with the proposed morphological decomposition. Both methods lead to significant noise **reduction**, where the morphological method introduces less signal degenerations.

...Descriptors: **image** reconstruction

...Identifiers: noise **reduction** ; ...

... **linear ratio** pyramid...

...nonlinear **image** filtering...

...ultrasound **image** quality

34/3,K/2 (Item 1 from file: 8)

DIALOG(R)File 8:Ei Compendex(R)

(c) 2002 Engineering Info. Inc. All rts. reserv.

05104170 E.I. No: EIP98084353210

**Title: Measurement of solar radiation with CCD-cameras: Influence of the spectral characteristic**

Author: Kaluza, Jens; Neumann, Andreas

Corporate Source: German Aerospace Cent (DLR), Koeln, Ger

Conference Title: Proceedings of the 1998 International Solar Energy Conference

Conference Location: Albuquerque, NM, USA Conference Date: 19980614-19980617

E.I. Conference No.: 48843

Source: Solar Engineering International Solar Energy Conference 1998. ASME, Fairfield, NJ, USA. p 425-428

Publication Year: 1998

CODEN: 85MEAZ

Language: English

...Abstract: flux mapping systems using CCD cameras in solar

concentrating facilities this leads to a non **linear ratio** of signal to irradiation. The error caused by non linearity can exceed more than 20...

...is pointed out and it is shown how the implementation of a bandpass filter can **reduce** the error in linearity significantly below 10%. (Author abstract) 5 Refs.

...Descriptors: Spectrum analysis; Charge coupled devices; Video cameras; Bandpass filters; Sensitivity analysis; Error analysis; Nonlinear optics; **Image coding**

?

40/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 2002 Institution of Electrical Engineers. All rts. reserv.

5455813 INSPEC Abstract Number: C9702-6130B-009

**Title: Hierarchical polygon tiling with coverage masks**

Author(s): Greene, N.

Author Affiliation: Apple Comput. Inc., Cupertino, CA, USA

Conference Title: Computer Graphics Proceedings. SIGGRAPH '96 p.65-74

Publisher: ACM, New York, NY, USA

Publication Date: 1996 Country of Publication: USA 528 pp.

ISBN: 0 89791 746 4 Material Identity Number: XX96-02088

U.S. Copyright Clearance Center Code: 0 89791 746 4/96/008.\$3.50

Conference Title: Proceedings of 23rd International Conference on Computer Graphics and Interactive Techniques (SIGGRAPH'96)

Conference Sponsor: ACM

Conference Date: 4-9 Aug. 1996 Conference Location: New Orleans, LA, USA

Language: English

Subfile: C

Copyright 1996, IEE

**Abstract:** We present a novel polygon tiling algorithm in which recursive subdivision of **image** space is driven by coverage masks that classify a convex polygon as inside, outside, or intersecting cells in an **image** hierarchy. This approach permits Warnock-style subdivision with its logarithmic search properties to be driven...

... tiling algorithm performs subdivision and visibility computations very rapidly while only visiting cells in the **image** hierarchy that are crossed by visible edges in the output **image**. Visible samples are never **overwritten**. At 512\*512 resolution, the algorithm tiles as rapidly as traditional incremental scan conversion and...

... densely occluded model, it computed visibility on a 4096\*4096 grid as rapidly as hierarchical **z - buffering** (Greene et al. 1993) tiled a 512\*512 grid, and it effectively antialiased scenes containing...

... When maintaining depth order of polygons is not convenient, we combine hierarchical tiling with hierarchical **z - buffering**, resorting to **z - buffering** only in regions of the screen where the closest object is not encountered first.

...Identifiers: **image** space...

... **image** hierarchy...

...output **image** ; ...

...hierarchical **z - buffering** ;

?

File 348:EUROPEAN PATENTS 1978-2002/Feb W04

(c) 2002 European Patent Office

File 349:PCT FULLTEXT 1983-2002/UB=20020307,UT=20020228

(c) 2002 WIPO/Univentio

Set	Items	Description
S1	392849	(IMAGE?? OR PICTURE?? OR PIXEL?? OR PEL OR PICTURE()ELEMEN- T?? OR PICEL?? OR PIXCEL??)
S2	244708	S1(3N)ORIGINAL
S3	38345	S1(3N)(GENERAT? OR CREAT? OR RENDER?)
S4	21	JUST()IN()FOCUS?
S5	88460	FOCUS?
S6	9222	Z(3N)(BUFFER? OR VALUE?)
S7	9481	OVERWRIT? OR OVER()WRIT?
S8	678	(POSITIONAL OR FARTHER OR NEARER)(3N)DISTANCE?
S9	762	S6(5N)(PREDETERMIN? OR SPECIFIC OR SPECIFIED OR SET OR PRE- SELECT? OR PRESET OR PRE() (SELECT? OR SET OR DETERMIN? OR SEL- ECT? OR SPECIFIED))
S10	5432	BLURRED OR BLURRY OR OUT(2N)FOCUS
S11	52	S10(3N)LEVEL?
S12	166641	MAGNIF? OR ENLARG?
S13	895033	REDUC? OR SMALL? OR MINIMI?
S14	298776	SEQUENTIAL? OR SEQUENCE?
S15	1	S11(3N)S12(3N)LEVEL??
S16	523589	UNIQUE OR SINGULAR? OR SPECIFIC
S17	102	LINEAR()RATIO
S18	2394	DEPTH(3N)FIELD?
S19	864	S1(S)INTERPOLAT?(S)ALGORITHM?
S20	75	(BILINEAR OR BI()LINEAR?) (3N)FILTER?
S21	3996	CONTROL(3N)DISTANC?
S22	3461	DEPTH(3N)DIRECTION??
S23	1487	AU=(NAKAMURA T? OR NAKAMURA, T? OR CUTHBERT D? OR CUTHBERT, D?)
S24	7045	IC=G06T?
S25	1	(S1 OR S2 OR S3)(S)S4(S)S10(S)S6
S26	15	S3(S)S5(S)S6
S27	4	S26(S)S10
S28	3	S27 NOT S25
S29	1	S1(S)S11(S)S16(S)S17(S)S18(S)S19
S30	0	S1(S)S20(S)S21(S)S22
S31	1	S23 AND S1(S)S9
S32	3	S1(S)S6(S)S5(S)S18 AND S24



15/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00739271 \*\*Image available\*\*

IMAGE RENDERING METHOD AND APPARATUS  
PROCEDE ET APPAREIL DE RENDU D'IMAGE

Patent Applicant/Assignee:

SONY COMPUTER ENTERTAINMENT INC, 1-1, Akasaka 7-chome, Minato-ku, Tokyo  
107-0052, JP, JP (Residence), JP (Nationality)

Inventor(s):

~~NAKAMURA~~ Tadashi, Sony Computer Entertainment Inc., 1-1, Akasaka 7-chome,  
Minato-ku, Tokyo 107-0052, JP  
CUTHBERT Simon Dylan, Sony Computer Entertainment Inc., 1-1, Akasaka  
7-chome, Minato-ku, Tokyo 107-0052, JP

Legal Representative:

YAMAMOTO Toshitake, 301, Ogikubo Sunny Garden, 28-9, Ogikubo 4-chome,  
Suginami-ku, Tokyo 167-0051, JP

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052640 A1 20000908 (WO 0052640)

Application: WO 2000JP1048 20000224 (PCT/WO JP0001048)

Priority Application: JP 9953397 19990301

Designated States: AU BR CA CN JP KR MX NZ RU SG

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 13211

Fulltext Availability:

Detailed Description

Detailed Description

... at ratios of 1/2, 1/4, and 1/8, thereafter, the reduced image is  
**magnified**, and the image significantly thereby **blurred** (**blurred**  
**level : Level -2**) is overwritten onto an image field in areas D that are  
located nearer to...

...original image is reduced at a ratio of 1/2, thereafter, the reduced  
image is **magnified**, and the image slightly thereby **blurred** (**blurred**  
**level : Level -1**) is overwritten onto an image field in areas B that  
are located between Znear...

25/3,K/1 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00739271 \*\*Image available\*\*

**IMAGE RENDERING METHOD AND APPARATUS  
PROCEDE ET APPAREIL DE RENDU D'IMAGE**

Patent Applicant/Assignee:

SONY COMPUTER ENTERTAINMENT INC, 1-1, Akasaka 7-chome, Minato-ku, Tokyo  
107-0052, JP, JP (Residence), JP (Nationality)

Inventor(s):

NAKAMURA Tadashi, Sony Computer Entertainment Inc., 1-1, Akasaka 7-chome,  
Minato-ku, Tokyo 107-0052, JP

CUTHBERT Simon Dylan, Sony Computer Entertainment Inc., 1-1, Akasaka  
7-chome, Minato-ku, Tokyo 107-0052, JP

Legal Representative:

YAMAMOTO Toshitake, 301, Ogikubo Sunny Garden, 28-9, Ogikubo 4-chome,  
Suginami-ku, Tokyo 167-0051, JP

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052640 A1 20000908 (WO 0052640)

Application: WO 2000JP1048 20000224 (PCT/WO JP0001048)

Priority Application: JP 9953397 19990301

Designated States: AU BR CA CN JP KR MX NZ RU SG

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 13211

Fulltext Availability:

Detailed Description

Claims

English Abstract

...two-dimensional screen. The depth-of-field display method turns objects corresponding to a preset **Z value** to **just - in - focus** states and overwrites **images** whose levels of **out -of- focus** states are sequentially increased corresponding to an increase in their positional distances to one of...

...direction. Also, this method uses a bilinear filter method to perform sequential reductions of the **original image**, and thereafter, performs magnification of the individual reduced **images**, thereby **generating** the **out -of- focus images**. Furthermore, the depth-of-field display method controls the levels of the **out -of- focus** states according to levels of the sequential reductions.

Detailed Description

... in a just-in-focus state, reducing the original image, and thereafter, magnifying the reduced **image**.

Also, the **rendering** apparatus of the invention comprises a **Z - buffer** for setting the depth direction of **pixels** and a **pixel -interpolation** algorithm and further comprises a device for presetting a **Z value** of the abovementioned **Z - buffer**; a device for **generating** an **image** in a **out -of- focus** state by reducing an **original image** in a **just - in - focus** state, and thereafter, magnifying the reduced **image**; and a device for overwriting the abovementioned **image** in the **out -of- focus** state on the abovementioned **original image** by using the abovementioned preset **Z value**. In the above, the described **rendering** apparatus turns an **image** field of an object corresponding to the point represented by the abovementioned **Z value** to the **just - in - focus** state, and concurrently, turns an **image** field of an object other than the abovementioned object to the **out -of- focus** state, thereby showing depth of field.

The above-described rendering apparatus of the present invention...

...thereafter, to magnify the reduced images, thereby generating the abovementioned out-of-focus and blurred images . Also, the rendering apparatus comprises a Z - buffer for setting the depth direction of pixels and a pixel -interpolation algorithm and further comprises a device for presetting a Z value of the abovementioned Z - buffer ; a device for generating multiple out -of- focus images each having a unique outof-focus level by reducing an original image in a just - in - focus state to images each having a unique linear ratio, and thereafter, magnifying images thereby reduced; and a device for using the abovementioned preset Z value to overwrite the abovementioned out -of- focus image on the image in the just - in - focus state, of which the abovementioned out -of- focus level is increased corresponding to an increase in its distance from a point represented by the abovementioned Z value , on the original image

In this, the abovementioned rendering apparatus turns an image field of an object located at a point corresponding to the abovementioned Z value to the just - in - focus state, and concurrently, turns an image field of an object other than the abovementioned object to the out -of- focus state wherein the abovementioned out -of- focus level is increased corresponding to an increase in its positional distance from the point represented by the abovementioned Z value , thereby generating images showing depth of field.

Furthermore, an image-generating method of the present invention comprises steps...comprises steps for turning image of objects located at a position corresponding to a preset Z value to a just - in - focus state and overwriting images of which levels of out -of- focus states are sequentially increased corresponding to an increase in their positional distances to one of a farther direction and a nearer direction from a point represented by the abovementioned preset Z value ; for using a pixel -interpolation algorithm to perform sequential reductions of an original image , and thereafter, to perform magnification of the reduced images , thereby generating the abovementioned images in the out -of- focus states; and for controlling levels of the abovementioned out -of- focus states according levels of the abovementioned sequential reductions.

Still furthermore, a storage medium of the...comprises steps for turning image of objects located at a position corresponding to a preset Z value to a just - in - focus state and overwriting images of which levels of out -of- focus states are sequentially increased corresponding to an increase in their positional distances to one of a farther direction and a nearer direction from a point represented by the abovementioned preset Z value ; for using a pixel -interpolation algorithm to perform sequential reductions of an original image , and thereafter, to perform magnification of the reduced images , thereby generating the abovementioned images in the out -of- focus states; and for controlling levels of the abovementioned out -of- focus states according levels of the abovementioned sequential reductions.

In addition, in the above, the abovementioned...object from the viewpoint is unique), wherein an object relatively farther is displayed in a blurred state ( out -of- focus or defocus state), and an object relatively nearer is displayed in a just - in - focus state.

As shown in FIG. 6, a case is assumed such that a screen contains...

...case discussed in (1) above.

Hereinbelow, discussion will be made for a case where the Z - buffer is used to generate an image that contains a plurality of objects each having a unique Z value (that is, the distance to the object from the viewpoint is unique), wherein an object relatively farther is displayed in the just - in - focus state, and an object relatively nearer is

displayed in the **blurred** state.

Originally, in a processing system that allows inversely setting of the **Z** value (a...obtained as described below.

In a single image representing multiple images each having a unique **Z value**, for example, an object having an intermediate **Z value** (representing an intermediate depth) is arranged in a **just - in - focus** state. As arrangement in the direction of depth (depth direction), the **blurred** level of an object having a **Z value** smaller than the above (representing a point farther than the above) is sequentially increased according to the level of the depth direction. In contrast, the **blurred** level of an object having a **Z value** larger than the above (representing a point nearer than the above) is sequentially increased according...

...level of the nearer direction.

In this way, when an object having an preset intermediate **Z value** is displayed in the **just - in - focus** state, and when the object is arranged to space far away from and nearer to a point represented by the **Z value** in the depth direction, an **image** whose **blurred** level is sequentially increased can be generated.

FIG. 13 shows principles of a method for...a still image in which the image field near the point represented by the preset **Z value** is displayed in the **just - in - focus** state. On the other hand, in the still **image**, the **image** field located nearer than the point represented by the preset **Z value** is **blurred** sequentially corresponding to the distance from the viewpoint, and the **image** field located farther than the point represented by the preset **Z value** is also **blurred** sequentially corresponding to the distance from the viewpoint.

Generating a number of the images of...

#### Claim

... in a just-in-focus state, reducing the original image, and thereafter, magnifying the reduced **image**.

2 A **rendering** apparatus comprising a **Z - buffer** for setting the depth direction of **pixels** and a **pixel**-interpolation algorithm, further comprising: a device for presetting a **Z value** of said **Z - buffer**; a device for **generating** an **image** in a **out-of-focus** state by reducing an **original image** in a **just - in - focus** state, and thereafter, magnifying the reduced **image**; and a device for overwriting said **image** in the **out-of-focus** state on said **original image** by using said preset **Z value**; wherein said **rendering** apparatus turns an **image** field of an object corresponding to the point represented by said **Z value** to the **just - in - focus** state, and concurrently, turns an **image** field of an object other than said object to the **out-of-focus** state, thereby showing depth of field.

3 A rendering apparatus as claimed in claim 2...

...VRAM, and thereafter, magnifies the reduced images, thereby generating said out-of-focus and blurred **images**.

7 A **rendering** apparatus comprising a **Z - buffer** for setting the depth direction of **pixels** and a **pixel**-interpolation algorithm, further comprising: a device for presetting a **Z value** of said **Z - buffer**; a device for generating multiple **out-of-focus images** each having a unique outof-focus level by reducing an **original image** in a **just - in - focus** state to **images** each having a unique linear ratio, and thereafter, magnifying **images** thereby reduced; and a device for using said preset **Z value** to overwrite said **out-of-focus image** on the

original image in the just - in - focus state, of which said out-of-focus level is increased corresponding to an increase in its distance from a point represented by said Z value , on the original image ; wherein said rendering apparatus turns an image field of an object located at a point corresponding to said Z value to the just - in - focus state, and concurrently, turns an - 31 image field of an object other than said object to the out-of-focus state wherein said outof-focus level is increased corresponding to an increase in its positional distance from the point represented by said Z value , thereby generating images showing depth of field.

8 An image-generating method comprising steps for preparing an original ...comprising steps for turning image of objects located at a position corresponding to a preset Z value to a just - in - focus state and overwriting images of which levels of out-of-focus states are sequentially increased corresponding to an increase in their positional distances to one of a farther direction and a nearer direction from a point represented by said preset Z value ; for using a pixelinterpolation algorithm to perform sequential reductions of an original image , and thereafter, to perform magnification of the reduced images , thereby generating said images in the out-of-focus states; and for controlling levels of said out-of-focus states according levels of said sequential reductions. - 34

22 A depth-of-field display method...comprises steps for turning image of objects located at a position corresponding to a preset Z value to a just - in - focus state and overwriting images of which levels of out-of-focus states are sequentially increased corresponding to an increase in their positional distances to one of a farther direction and a nearer direction from a point represented by said preset Z value ; for using a pixel -interpolation algorithm to perform sequential reductions of an - 37 original image , and thereafter, to perform magnification of the reduced images , thereby generating said images in the out-of-focus states; and for controlling levels of said outof-focus states according levels of said sequential...

28/3,K/1 (Item 1 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
(c) 2002 European Patent Office. All rts. reserv.

00490317

**Image processing apparatus**  
**Bildverarbeitungsvorrichtung**  
**Appareil de traitement d'image**  
PATENT ASSIGNEE:

CANON KABUSHIKI KAISHA, (542361), 30-2, 3-chome, Shimomaruko, Ohta-ku,  
Tokyo, (JP), (applicant designated states: DE;FR;GB;IT;NL)

INVENTOR:

Funada, Masahiro, 15-L204, Higashi-terao 1-chome, Tsurumi-ku,  
Yokohama-shi, Kanagawa-ken, (JP)  
Ohta, Ken-ichi, 54-50, Shibokuchi, Takatsu-ku, Kawasaki-shi, Kanagawa-ken  
, (JP)

Takaragi, Yoichi, 7-28-2, Hiyoshi 3-chome, Kohoku-ku, Yokohama-shi,  
Kanagawa-ken, (JP)

Ohta, Eiji, 2-8, Kataseyama 3-chome, Fujisawa-shi, Kanagawa-ken, (JP)

LEGAL REPRESENTATIVE:

Beresford, Keith Denis Lewis et al (28273), BERESFORD & Co. 2-5 Warwick  
Court High Holborn, London WC1R 5DJ, (GB)

PATENT (CC, No, Kind, Date): EP 488796 A1 920603 (Basic)  
EP 488796 B1 970827

APPLICATION (CC, No, Date): EP 91311132 911129;

PRIORITY (CC, No, Date): JP 90330883 901130; JP 90330884 901130; JP  
90330886 901130; JP 90330888 901130; JP 90330889 901130; JP 90330890  
901130

DESIGNATED STATES: DE; FR; GB; IT; NL

INTERNATIONAL PATENT CLASS: G03G-021/00; G06K-009/64;

ABSTRACT WORD COUNT: 66

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9708W4	1077
CLAIMS B	(German)	9708W4	1030
CLAIMS B	(French)	9708W4	1226
SPEC B	(English)	9708W4	16426
Total word count - document A			0
Total word count - document B			19759
Total word count - documents A + B			19759

...SPECIFICATION to hold) shown in the table of Fig. 31. Numeral 6303-2  
denotes a ROM for generating the input signal  $x_i$ )  $\times 255 (1-(\beta))$   
(= (epsilon) in the assumption of this example...storing operation  
programs, a RAM having a working area for the program, and circuitry for  
generating the CLK (the clock signal for transferring pixels) and the  
signal HSYNC (the signal signal

28/3,K/2 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00822324 \*\*Image available\*\*

**GAME SYSTEM AND IMAGE CREATING METHOD**  
**SYSTEME DE JEU ET PROCEDE DE CREATION D'IMAGE**  
Patent Applicant/Assignee:

NAMCO LTD, 8-5, Tamagawa 2-chome, Ota-ku, Tokyo 146-0095, JP, JP  
(Residence), JP (Nationality), (For all designated states except: US)

Patent Applicant/Inventor:

KITSUTAKA Shigeru, c/o NAMCO LTD., 8-5, Tamagawa 2-chome, Ota-ku, Tokyo  
146-0095, JP, JP (Residence), JP (Nationality), (Designated only for:  
US)

Legal Representative:

FUSE Yukio (et al) (agent), 2nd Floor, Ogikubo TM Bldg., 26-13, Ogikubo  
5-chome, Suginami-ku, Tokyo 167-0051, JP,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200155969 A1 20010802 (WO 0155969)

Application: WO 2001JP408 20010123 (PCT/WO JP0100408)

Priority Application: JP 200020464 20000128; JP 2000213725 20000714; JP 2000213988 20000714

Designated States: GB US

Publication Language: Japanese

Filing Language: Japanese

English Abstract

A game system and a program for **creating** a **focused image** such as an image corrected by a video filter, for example, gamma-correction or an...

...the real world with a light processing load. Original image information (R, G, B, and **Z values**) is defined as index numbers for a look-up table (LUT) for index color texture...

...a polygon having a display screen size (division block size) to conduct gamma-correction. The **Z value** of each pixel of the original picture is defined as an index number of the...

...virtual object is conducted. The alpha value is so determined as to correspond to the **Z value** of each pixel of the original image. The original image and a **blurred** image are combined. Adjustment data for adjusting the luminance of the monitor is determined according...

28/3,K/3 (Item 2 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

(c) 2002 WIPO/Univentio. All rts. reserv.

00406228 \*\*Image available\*\*

**THREE-DIMENSIONAL IMAGE TEXTURE MAPPING**  
**MAPPAGE DE TEXTURE D'IMAGE TRIDIMENSIONNELLE**

Patent Applicant/Assignee:

PHILIPS ELECTRONICS N V,  
PHILIPS NORDEN AB,

Inventor(s):

WOOD Karl Joseph,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9746973 A1 19971211

Application: WO 97IB627 19970602 (PCT/WO IB9700627)

Priority Application: GB 9611941 19960607

Designated States: JP AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Fulltext Word Count: 5400

Fulltext Availability:

Detailed Description

Detailed Description

... a point of interest. The effect mimics what happens in the cinema when a camera **focuses** on a point of interest and other parts of the scene are **blurred**.

Previously, however, systems such as that of EP-A-0 438 195 have required the...

?

29/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00739271 \*\*Image available\*\*

**IMAGE RENDERING METHOD AND APPARATUS**  
**PROCEDE ET APPAREIL DE RENDU D'IMAGE**

Patent Applicant/Assignee:

SONY COMPUTER ENTERTAINMENT INC, 1-1, Akasaka 7-chome, Minato-ku, Tokyo  
107-0052, JP, JP (Residence), JP (Nationality)

Inventor(s):

NAKAMURA Tadashi, Sony Computer Entertainment Inc., 1-1, Akasaka 7-chome,  
Minato-ku, Tokyo 107-0052, JP

CUTHBERT Simon Dylan, Sony Computer Entertainment Inc., 1-1, Akasaka  
7-chome, Minato-ku, Tokyo 107-0052, JP

Legal Representative:

YAMAMOTO Toshitake, 301, Ogikubo Sunny Garden, 28-9, Ogikubo 4-chome,  
Suginami-ku, Tokyo 167-0051, JP

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052640 A1 20000908 (WO 0052640)

Application: WO 2000JP1048 20000224 (PCT/WO JP0001048)

Priority Application: JP 9953397 19990301

Designated States: AU BR CA CN JP KR MX NZ RU SG

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 13211

Fulltext Availability:

Claims

Claim

... images.

7 A rendering apparatus comprising a Z-buffer for setting the depth  
direction of

**pixels** and a **pixel** -interpolation algorithm, further comprising:  
a device for presetting a Z value of said Z-buffer;  
a device for generating multiple out-of-focus **images** each having a  
**unique** outof-focus level by reducing an original **image** in a  
just-in-focus state to **images** each having a **unique** linear ratio, and  
thereafter, magnifying **images** thereby reduced; and a device for using  
said preset Z value to overwrite said out-of-focus **image** on the  
original **image** in the just-in-focus state, of which said out-of-focus  
level is increased...

...increase in its distance from a point represented by said Z value, on  
the original **image** ;  
wherein said rendering apparatus turns an **image** field of an object  
located at a point corresponding to said Z value to the just-in-focus  
state, and concurrently, turns an - 31 **image** field of an object other  
than said object to the out-of-focus state wherein...

...increase in its positional distance from the point represented by said Z  
value, thereby generating **images** showing **depth** of **field** .

8 An image-generating method comprising steps for preparing an original  
image in a just...

?



31/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00739271 \*\*Image available\*\*

**IMAGE RENDERING METHOD AND APPARATUS  
PROCEDE ET APPAREIL DE RENDU D'IMAGE**

Patent Applicant/Assignee:

SONY COMPUTER ENTERTAINMENT INC, 1-1, Akasaka 7-chome, Minato-ku, Tokyo  
107-0052, JP, JP (Residence), JP (Nationality)

Inventor(s):

**NAKAMURA Tadashi**, Sony Computer Entertainment Inc., 1-1, Akasaka  
7-chome, Minato-ku, Tokyo 107-0052, JP

**CUTHBERT Simon Dylan**, Sony Computer Entertainment Inc., 1-1, Akasaka  
7-chome, Minato-ku, Tokyo 107-0052, JP

Legal Representative:

**YAMAMOTO Toshitake**, 301, Ogikubo Sunny Garden, 28-9, Ogikubo 4-chome,  
Suginami-ku, Tokyo 167-0051, JP

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052640 A1 20000908 (WO 0052640)

Application: WO 2000JP1048 20000224 (PCT/WO JP0001048)

Priority Application: JP 9953397 19990301

Designated States: AU BR CA CN JP KR MX NZ RU SG

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 13211

Inventor(s):

**NAKAMURA Tadashi** ...

Fulltext Availability:

Detailed Description

Claims

English Abstract

...a two-dimensional screen. The depth-of-field display method turns objects corresponding to a **preset Z value** to just-in-focus states and overwrites **images** whose levels of out-of-focus states are sequentially increased corresponding to an increase in...

...Also, this method uses a bilinear filter method to perform sequential reductions of the original **image**, and thereafter, performs magnification of the individual reduced **images**, thereby generating the out-of-focus **images**. Furthermore, the depth-of-field display method controls the levels of the out-of-focus...

Detailed Description

... in the out-of-focus state on the abovementioned original image by using the abovementioned **preset Z value**. In the above, the described rendering apparatus turns an **image** field of an object corresponding to the point represented by the abovementioned Z value to the just-in-focus state, and concurrently, turns an **image** field of an object other than the abovementioned object to the out-of-focus state...

...alpha planes for selectively masking the pixels. In this, the rendering apparatus uses the abovementioned **preset Z value** to sequentially reduce the abovementioned original **image**, to overwrite out-of-focus and blurred **images** obtained by magnifying the reduced **images** on the abovementioned original **image**, and to turn **image** fields of objects located farther than a point represented by the abovementioned Z value. The described rendering apparatus also uses the abovementioned alpha planes to mask the **image** fields of the objects located farther than the point represented by the abovementioned Z value, thereafter, to overwrite the abovementioned out-of-focus and blurred **images** on the abovementioned original **image**, and to turn **image** fields located nearer than the point represented by the abovementioned Z value to out-of...

...linear ratio, and thereafter, magnifying images thereby reduced; and

32/3,K/1 (Item 1 from file: 349)  
DIALOG(R) File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00739271 \*\*Image available\*\*

**IMAGE RENDERING METHOD AND APPARATUS**

**PROCEDE ET APPAREIL DE RENDU D'IMAGE**

Patent Applicant/Assignee:

SONY COMPUTER ENTERTAINMENT INC, 1-1, Akasaka 7-chome, Minato-ku, Tokyo  
107-0052, JP, JP (Residence), JP (Nationality)

Inventor(s):

NAKAMURA Tadashi, Sony Computer Entertainment Inc., 1-1, Akasaka 7-chome,  
Minato-ku, Tokyo 107-0052, JP

CUTHBERT Simon Dylan, Sony Computer Entertainment Inc., 1-1, Akasaka  
7-chome, Minato-ku, Tokyo 107-0052, JP

Legal Representative:

YAMAMOTO Toshitake, 301, Ogikubo Sunny Garden, 28-9, Ogikubo 4-chome,  
Suginami-ku, Tokyo 167-0051, JP

Patent and Priority Information (Country, Number, Date):

Patent: WO 200052640 A1 20000908 (WO 0052640)

Application: WO 2000JP1048 20000224 (PCT/WO JP0001048)

Priority Application: JP 9953397 19990301

Designated States: AU BR CA CN JP KR MX NZ RU SG

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Publication Language: English

Filing Language: English

Fulltext Word Count: 13211

Main International Patent Class: G06T-003/40

International Patent Class: G06T-015/40

Fulltext Availability:

Detailed Description

Claims

**English Abstract**

A **depth-of-field** display method displays a sense of distance on a two-dimensional screen. The **depth-of-field** display method turns objects corresponding to a preset Z value to just-in-**focus** states and overwrites **images** whose levels of out-of-**focus** states are sequentially increased corresponding to an increase in their positional distances to one of...

...Also, this method uses a bilinear filter method to perform sequential reductions of the original **image**, and thereafter, performs magnification of the individual reduced **images**, thereby generating the out-of-**focus images**. Furthermore, the **depth-of-field** display method controls the levels of the out-of-**focus** states according to levels of the sequential reductions.

**Detailed Description**

... an object other than the abovementioned object to the out-of-focus state, thereby showing **depth of field**.

The above-described rendering apparatus of the present invention which uses the abovementioned device for...

...positional distance from the point represented by the abovementioned Z value, thereby generating images showing **depth of field**.

Furthermore, an image-generating method of the present invention comprises steps for preparing an original...a plurality of out-of-focus images each having a unique blurred level.

Also, the **depth-of-field** display method of the invention comprises steps for using a pixel-interpolation algorithm to reduce...

...reduced image, thereby generating a blurred and out-of-focus image; and for using a **Z - buffer** capable of controlling the distance in the depth

32/3,K/2 (Item 2 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00736239 \*\*Image available\*\*

A GRAPHICS SYSTEM CONFIGURED TO PERFORM PARALLEL SAMPLE TO PIXEL  
CALCULATION  
SYSTEME GRAPHIQUE CONFIGURE POUR EFFECTUER LE CALCUL ECHANTILLON-PIXEL EN  
PARALLELE

Patent Applicant/Assignee:

SUN MICROSYSTEMS INC, 901 San Antonio Road, Palo Alto, CA 94303, US, US  
(Residence), US (Nationality)

Inventor(s):

DEERING Michael F, 657 Cuesta Drive, Los Altos, CA 94024, US  
NAEGLE Nathaniel David, 7756 Oak Creek Court, Pleasanton, CA 94588, US  
NELSON Scott R, 4429 Clovewood Lane, Pleasanton, CA 94588, US

Legal Representative:

CONLEY ROSE & TAYON P C, Dan Christen,, P.O. Box 398, Austin, TX  
78767-0398, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200049577 A1 20000824 (WO 0049577)  
Application: WO 2000US4148 20000217 (PCT/WO US0004148)  
Priority Application: US 99251844 19990217; US 99472940 19991227

Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK  
DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ  
TM TR TT TZ UA UG UZ VN YU ZA ZW

(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG

(AP) GH GM KE LS MW SD SL SZ TZ UG ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 23397

Main International Patent Class: G06T-015/50

Fulltext Availability:

Detailed Description

Detailed Description

... process 352 then calculates the z and color information (which may  
include alpha or other **depth** of **field** information values) for each of  
these samples and stores the data into sample buffer 162...

...bins corresponding to the center of the 2-D viewport. Since viewers are  
likely to **focus** their attention mostly on the center of the screen SCR  
or display **image** DIM, more processing bandwidth may be dedicated to  
providing enhanced **image** quality in the center of 2-D viewport. Note  
that the size and shape of...

32/3,K/3 (Item 3 from file: 349)  
DIALOG(R)File 349:PCT FULLTEXT  
(c) 2002 WIPO/Univentio. All rts. reserv.

00415603 \*\*Image available\*\*

POST-PROCESSING GENERATION OF FOCUS/DEFOCUS EFFECTS FOR COMPUTER GRAPHICS  
IMAGES  
PRODUCTION APRES TRAITEMENT D'EFFETS DE FOCALISATION/DEFOCALISATION POUR  
IMAGES INFOGRAPHIQUES

Patent Applicant/Assignee:

PHILIPS ELECTRONICS N V,  
PHILIPS NORDEN AB,

Inventor(s):

GALLERY Richard David,  
BLISS Nathan David,  
Patent and Priority Information (Country, Number, Date):  
Patent: WO 9806064 A1 19980212  
Application: WO 97IB733 19970618 (PCT/WO IB9700733)  
Priority Application: GB 9616262 19960802  
Designated States: JP KR AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
Publication Language: English  
Fulltext Word Count: 3643

Main International Patent Class: G06T-015/00

International Patent Class: G06T-15:10 ...

... G06T-05:00

Fulltext Availability:

Detailed Description

Detailed Description

... of focus F (or focus depth ZF) with a further optional input 40 for  
the **field depth** D as described  
above. The value of ZF and/or D may be determined by.

File 344:CHINESE PATENTS ABS APR 1985-2001/Dec  
(c) 2002 EUROPEAN PATENT OFFICE  
File 347:JAPIO Oct/1976-2001/Nov(Updated 020305)  
(c) 2002 JPO & JAPIO  
File 350:Derwent WPIX 1963-2001/UD,UM &UP=200216  
(c) 2002 Derwent Info Ltd

Set	Items	Description
S1	1121237	(IMAGE?? OR PICTURE?? OR PIXEL?? OR PEL OR PICTURE()ELEMEN- T?? OR PICEL?? OR PIXEL??)
S2	73737	S1 AND ORIGINAL
S3	207375	S1 AND (GENERAT? OR CREAT? OR RENDER?)
S4	20	JUST()IN()FOCUS?
S5	341034	FOCUS?
S6	3397	Z(3N)(BUFFER? OR VALUE?)
S7	6231	OVERWRIT? OR OVER()WRIT?
S8	525	(POSITIONAL OR FARTHER OR NEARER)(3N)DISTANCE?
S9	1267	S6 AND (PREDETERMIN? OR SPECIFIC OR SPECIFIED OR SET OR PR- ESELECT? OR PRESET OR PRE()(SELECT? OR SET OR DETERMIN? OR SE- LECT? OR SPECIFIED))
S10	4128	BLURRED OR BLURRY OR OUT(2N)FOCUS
S11	297	S10 AND LEVEL?
S12	145263	MAGNIF? OR ENLARG?
S13	3384419	REDUC? OR SMALL? OR MINIMI?
S14	446200	SEQUENTIAL? OR SEQUENCE?
S15	3	S11(3N)S12(3N)LEVEL??
S16	737005	UNIQUE OR SINGULAR? OR SPECIFIC
S17	26	LINEAR()RATIO
S18	1412	DEPTH(3N)FIELD?
S19	131	S1 AND INTERPOLAT? AND ALGORITHM?
S20	20	(BILINEAR OR BI()LINEAR?)(3N)FILTER?
S21	4553	CONTROL(3N)DISTANC?
S22	7505	DEPTH(3N)DIRECTION??
S23	25620	AU=(NAKAMURA T? OR NAKAMURA, T? OR CUTHBERT D? OR CUTHBERT, D?)
S24	2	S3 AND S5 AND S6 AND S10
S25	136	S1 AND S23 AND S5
S26	2	S25 AND S18
S27	2	S26 NOT S24
S28	4	S25 AND Z
S29	4	S28 NOT (S24 OR S26)
S30	0	S4 AND (S10 OR S11) AND (S6 OR S9) AND S8
S31	0	S1 AND S12 AND S13 AND S14 AND S17 AND S18
S32	1	S1 AND S10 AND S18 AND S20
S33	0	S1 AND S10 AND S21 AND S22
S34	1	S19 AND S4
S35	0	S34 NOT (S24 OR S26 OR S28 OR S32)
S36	4	(S1 OR S2 OR S3) AND S5 AND (S6 OR S9) AND S10
S37	2	S36 NOT (S24 OR S26 OR S28 OR S32)

15/3,K/1 (Item 1 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2002 JPO & JAPIO. All rts. reserv.

03244730 \*\*Image available\*\*

OPTICAL DISK PLAYER

PUB. NO.: 02-220230 [JP 2220230 A]

PUBLISHED: September 03, 1990 (19900903)

INVENTOR(s): TATEISHI KIYOSHI

APPLICANT(s): PIONEER ELECTRON CORP [000501] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 01-041417 [JP 8941417]

FILED: February 21, 1989 (19890221)

JOURNAL: Section: P, Section No. 1132, Vol. 14, No. 525, Pg. 115, November 19, 1990 (19901119)

#### ABSTRACT

...an optical disk player in which lead-in range in a focus servo device is **enlarged** by providing an **out focus** detection means, a **level** increasing means and a signal selection relay means in the focus servo device...

15/3,K/2 (Item 2 from file: 347)

DIALOG(R)File 347:JAPIO

(c) 2002 JPO & JAPIO. All rts. reserv.

01527177 \*\*Image available\*\*

TELEVISION SIGNAL GENERATING CIRCUIT

PUB. NO.: 60-005677 [JP 60005677 A]

PUBLISHED: January 12, 1985 (19850112)

INVENTOR(s): MIKADO TSUNEO

APPLICANT(s): NIPPON TELEVISION KOGYO KK [470117] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 58-113476 [JP 83113476]

FILED: June 23, 1983 (19830623)

JOURNAL: Section: E, Section No. 315, Vol. 09, No. 115, Pg. 161, May 18, 1985 (19850518)

#### ABSTRACT

...an out-focus signal (f). This signal (f) is given to a multiplier 4, a **magnification** (x) is multiplied to its **level** and the signal is led to a control input of the gain control circuit 2...

15/3,K/3 (Item 1 from file: 350)

DIALOG(R)File 350:Derwent WPIX

(c) 2002 Derwent Info Ltd. All rts. reserv.

003354211

WPI Acc No: 1982-L2234E/198234

**Optical document scanner with two levels of magnification - uses separate optical system for each level to maintain image focussing**

Patent Assignee: CANON KK (CANO )

Inventor: NAGANE H

Number of Countries: 002 Number of Patents: 002

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 57115071	A	19820717				198234 B
US 4424534	A	19840103	US 81335467	A	19811229	198404

Priority Applications (No Type Date): JP 811853 A 19810109; JP 812271 A 19810109

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

...Abstract (Basic): an image detector such as a charge-coupled device (CCD) array at one of two **levels** of **magnification** . A separate optical system is used for projecting the original image at each magnification and...

24/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

06665266 \*\*Image available\*\*  
DRAWING DEVICE, AND METHOD FOR REPRESENTING DEPTH OF FIELD BY THE DRAWING  
DEVICE

PUB. NO.: 2000-251090 [JP 2000251090 A]  
PUBLISHED: September 14, 2000 (20000914)  
INVENTOR(s): NAKAMURA ITARU  
DYLAN CUTHBERT  
APPLICANT(s): SONY COMPUTER ENTERTAINMENT INC  
APPL. NO.: 11-053397 [JP 9953397]  
FILED: March 01, 1999 (19990301)

#### ABSTRACT

... distance from a viewpoint to an object on a two-dimensional screen by putting the **image** part of the object corresponding to a **Z value** just in **focus** and other **image** parts of the object **out of focus**.

SOLUTION: An **image** (original **image**) in a VRAM drawing area 501 is reduced to a half in steps in work areas 503 to 505 to **generate images** of target resolution of  $(1/2)n+1$  of the original **image**. Thus, the **images** of target resolution are outputted to the original VRAM drawing area 501 by applying **pixel** interpolating algorithm. At this time, a proper value is set as the **Z value** and then only **pixels** deeper than the **Z** are overwritten with **images** of lower resolution to obtain an **image** which is **out of focus** inside the **Z** as a border. Namely, the **image** can be **generated** which represents the object with the **Z value** just in **focus** and increases inwardly in defocusing degree in order with the distance from the **Z value**.

COPYRIGHT: (C)2000,JPO

24/3,K/2 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Derwent Info Ltd. All rts. reserv.

012449300 \*\*Image available\*\*  
WPI Acc No: 1999-255408/199922  
XRPX Acc No: N99-190233

Defocussing depth of field image generation method for e.g. computer generated images

Patent Assignee: NIPPON TELEGRAPH & TELEPHONE CORP (NITE )

Inventor: KOTANI N

Number of Countries: 003 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
CA 2239279	A	19981202	CA 2239279	A	19980601	199922 B
JP 11120377	A	19990430	JP 98146355	A	19980527	199928
US 6157387	A	20001205	US 9889085	A	19980602	200066

Priority Applications (No Type Date): JP 97217725 A 19970812; JP 97144024 A 19970602

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
CA 2239279	A		60	G06T-011/00	
JP 11120377	A		34	G06T-015/40	
US 6157387	A			G06T-015/00	

Defocussing depth of field image generation method for e.g. computer generated images

Abstract (Basic):

... been coordinate converted and hidden surface processed. The processor assigns R, G, B, A and **Z values** to each **pixel** in the **image**. The object model data is derived from an object whose



positional relationships are represented from the vantage point using depth of field (i.e. the effective **focus** range within which the object is **focussed** ).

... For **image generating** apparatus e.g. **generating** realistic depth of field using computer graphics. For instance, when composite **image** of several **images** is put together; objects in background must be **blurred** slightly and those in foreground must appear sharp...

...Previously defocusing had to be applied when filming the parts of **image** initially; this is difficult and restrictive, the method allows post defocussing processing to be applied to **image** after filming...

...The drawing shows a structural diagram of the **image generating** apparatus used to implement the method...

...Title Terms: **IMAGE** ;

27/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05235962 \*\*Image available\*\*  
STEREOSCOPIC VIDEO REPRODUCING DEVICE AND STEREOSCOPIC **IMAGE** PICKUP  
DEVICE

PUB. NO.: 08-191462 [JP 8191462 A]  
PUBLISHED: July 23, 1996 (19960723)  
INVENTOR(s): ARAOKA SHINJI  
SATO MASAO

NAKAMURA TSUTOMU  
IMAIZUMI MASAKI  
HANKAWA MASASHI

APPLICANT(s): OLYMPUS OPTICAL CO LTD [000037] (A Japanese Company or  
Corporation), JP (Japan)

APPL. NO.: 07-002118 [JP 952118]  
FILED: January 10, 1995 (19950110)

STEREOSCOPIC VIDEO REPRODUCING DEVICE AND STEREOSCOPIC **IMAGE** PICKUP  
DEVICE

INVENTOR(s): ARAOKA SHINJI  
SATO MASAO  
NAKAMURA TSUTOMU  
IMAIZUMI MASAKI  
HANKAWA MASASHI

#### ABSTRACT

... relieve the fatigue and sense of incongruity of the operator due to an  
object video **image** outside a **focusing** allowable range by utilizing  
parallax of both eyes so as to obtain a stereoscopic **image** .

...

...CONSTITUTION: A **focus** limit arithmetic processing section 32  
calculates a **focus** limit range based on information such as object  
distance, congestion point, base line length from a camera system control  
section 31 and information such as virtual **image** position, field angle  
and congestion angle and conducts **focusing** within the limit, then an  
object in a non-**focused** range is not **focused** . Then an optimum object  
**field depth** arithmetic processing section 34 sets optimizingly a  
combination of an aperture and an electronic shutter speed based on the  
**focus** limit and the **focus** information so that the object in a non-  
**focusing** range distance causes no double **image** and a natural degree of  
fog is sensed. Thus, the operator views a stereoscopic **image** without a  
sense of incongruity and fatigue.

27/3,K/2 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Derwent Info Ltd. All rts. reserv.

013586284 \*\*Image available\*\*  
WPI Acc No: 2001-070491/200108  
XRPX Acc No: N01-053371

Image rendering apparatus for entertainment system e.g. TV game system,  
has image generating device which produces image in out-of- focus  
state by using original image in just-in- focus state  
Patent Assignee: SONY COMPUTER ENTERTAINMENT INC (SONY ); SONY COMPUTER  
ENTERTAINMENT KK (SONY )

Inventor: CUTHBERT D S ; NAKAMURA T ; CUTHBERT S; CUTHBERT S D

Number of Countries: 029 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200052640	A1	20000908	WO 2000JP1048	A	20000224	200108 B

AU 200026908	A	20000921	AU 200026908	A	20000224	200108
JP 2000251090	A	20000914	JP 9953397	A	19990301	200108
EP 1157359	A1	20011128	EP 2000905303	A	20000224	200201
			WO 2000JP1048	A	20000224	
BR 200010369	A	20011226	BR 200010369	A	20000224	200206
			WO 2000JP1048	A	20000224	

Priority Applications (No Type Date): JP 9953397 A 19990301

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
-----------	------	-----	----	----------	--------------

WO 200052640	A1	E	58	G06T-003/40	
--------------	----	---	----	-------------	--

Designated States (National): AU BR CA CN JP KR MX NZ RU SG

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU

MC NL PT SE

AU 200026908	A		G06T-003/40	Based on patent WO 200052640
--------------	---	--	-------------	------------------------------

JP 2000251090	A	16	G06T-015/00	
---------------	---	----	-------------	--

EP 1157359	A1	E	G06T-003/40	Based on patent WO 200052640
------------	----	---	-------------	------------------------------

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI

LU MC NL PT SE

BR 200010369	A		G06T-015/00	Based on patent WO 200052640
--------------	---	--	-------------	------------------------------

Image rendering apparatus for entertainment system e.g. TV game system,  
has image generating device which produces image in out-of- focus  
state by using original image in just-in- focus state

Inventor: CUTHBERT D S ...

... NAKAMURA T

Abstract (Basic):

... An image generating device produces an image in an out-of-  
focus state by using an original image in a just-in- focus state.

The original image is sequentially reduced and magnified.

... a) an image generating method...

...b) a depth -of- field displaying method...

...Enables showing the depth of field in order to display sense of  
distance from viewpoint to objects on a two-dimensional...

...shows the explanatory drawing of the usage of bilinear filters for  
sequentially reducing and magnifying images .

Title Terms: IMAGE ;

?

29/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05439450 \*\*Image available\*\*  
**IMAGE FORMING DEVICE**

PUB. NO.: 09-054250 [JP 9054250 A]  
PUBLISHED: February 25, 1997 (19970225)  
INVENTOR(s): **NAKAMURA TETSUYA**  
APPLICANT(s): ASAHI OPTICAL CO LTD [350041] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 07-228531 [JP 95228531]  
FILED: August 14, 1995 (19950814)

**IMAGE FORMING DEVICE**

INVENTOR(s): **NAKAMURA TETSUYA**

**ABSTRACT**

... to an assembling error, etc., by adjusting the eccentricity of the lens of an optical **image** forming system on at least two places...

...condenser lens G1 is arranged and a second lens frame 2b on which a the **image** side lens group G2 of a first lens group is arranged is enabled to adjust...

... with a micrometer and an actuator, translate the respective lens groups in (y) direction and ( z ) direction in a plane perpendicular to the direction X of the optical axis or tilt them around the y and z axes. By adjusting two directions at the time of translation and two axes at the...

...2c is driven in the direction X of the optical axis by means of a **focusing** mechanism 3c so that a **focus** of a reducing optical system 20 is matched with a photoreceptor P.

29/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

03577107 \*\*Image available\*\*  
**PRODUCTION OF OPTICAL SEMICONDUCTOR ELEMENT MODULE**

PUB. NO.: 03-240007 [JP 3240007 A]  
PUBLISHED: October 25, 1991 (19911025)  
INVENTOR(s): **NAKAMURA TAKESHI**  
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 02-037670 [JP 9037670]  
FILED: February 19, 1990 (19900219)  
JOURNAL: Section: P, Section No. 1302, Vol. 16, No. 28, Pg. 56,  
January 23, 1992 (19920123)

INVENTOR(s): **NAKAMURA TAKESHI**

**ABSTRACT**

PURPOSE: To detect a light receiving/emitting part as a two-dimensional **image** and to shorten the time for adjustment by aligning the center of the light receiving...

... illuminated by a vertical type illuminating device built in the optical system 12. While the **image** 52 of the light receiving part of the element 1 formed of the lens 2 is magnified by the optical system 12, the **image** is projected on the monitor television 13 using the telecamera 11. The optical system 12 is kept **focused** within the same plane as a female contact surface 54 at this time and the light receiving part 51 is moved in

a Z -axis direction via the jig 102 to adjust the position of the element 1 in the Z -axis direction in such a manner that the **image** of the light receiving part is **focused** to the optical system 12.

29/3,K/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

02536519 \*\*Image available\*\*  
NON-CONTACT DISPLACEMENT GAUGE

PUB. NO.: 63-153419 [JP 63153419 A]  
PUBLISHED: June 25, 1988 (19880625)  
INVENTOR(s): KUWABARA YOSHIHARU  
NAKAMURA TAIZO  
APPLICANT(s): MITSUTOYO CORP [402556] (A Japanese Company or Corporation),  
JP (Japan)  
APPL. NO.: 61-302230 [JP 86302230]  
FILED: December 18, 1986 (19861218)  
JOURNAL: Section: P, Section No. 781, Vol. 12, No. 415, Pg. 87,  
November 04, 1988 (19881104)

INVENTOR(s): KUWABARA YOSHIHARU  
NAKAMURA TAIZO

#### ABSTRACT

PURPOSE: To detect a displacement by using an **image** forming lens for forming an **image** of a very small spot light to an object to be measured, and a sensor for outputting a signal corresponding to a light quantity distribution centroid position of focal shift **image** by the very small spot light, and outputting a displacement signal from a **focusing** surface of the object to be measured...

...CONSTITUTION: When an object to be measured is displaced in the Z direction from a **focusing** surface and conforms with a displacement surface of P1 or P2, a condensing point of an **image** of a very small spot light becomes Q1 or Q2. In this case, an **image** limited by an annular mask 24 of a focal shift **image** of the very small spot light is formed in a sensor 26. Accordingly, the sensor...

... centroid position in the radial direction centering around an optical axis of this focal shift **image** , and a displacement signal (d) is outputted from a displacement Z of the object to be measured and a differential amplifier. Accordingly, since this displacement signal (d) is zero, it is detected that the displacement surface is a **focusing** surface.

29/3,K/4 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Derwent Info Ltd. All rts. reserv.

011220572 \*\*Image available\*\*  
WPI Acc No: 1997-198497/199718  
Related WPI Acc No: 1997-061048; 1997-061052; 1997-068759; 1997-198498  
XRPX Acc No: N97-163986

Image forming device with lens movement mechanism - installs convex lenses in frame which are rotated along three coordinate axis by individual displacement controllers

Patent Assignee: ASAHI OPTICAL CO LTD (ASAO ); ASAHI KOGAKU KOGYO KK (ASAO )

Inventor: IIZUKA T; MARUYAMA K; NAKAMURA T  
Number of Countries: 002 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 9054250	A	19970225	JP 95228531	A	19950814	199718 B
US 5745296	A	19980428	US 96648767	A	19960516	199824

Priority Applications (No Type Date): JP 95228531 A 19950814; JP 95142744 A  
19950517; JP 95142745 A 19950517; JP 95142747 A 19950517; JP 95228532 A  
19950814

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
JP 9054250	A		7	G02B-013/24	
US 5745296	A		51	G02B-027/10	

Image forming device with lens movement mechanism...

...Inventor: NAKAMURA T

...Abstract (Basic): The displacement controller displace the convex lenses individually along X,Y and Z axis are made to tilt. The **image** is **focussed** on a recording photosensitive member (20) positioned in a table...

Title Terms: **IMAGE** ;

,k/all

32/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2002 Derwent Info Ltd. All rts. reserv.

013586284 \*\*Image available\*\*  
WPI Acc No: 2001-070491/200108  
XRPX Acc No: N01-053371

Image rendering apparatus for entertainment system e.g. TV game system,  
has image generating device which produces image in out -of- focus  
state by using original image in just-in-focus state  
Patent Assignee: SONY COMPUTER ENTERTAINMENT INC (SONY ); SONY COMPUTER  
ENTERTAINMENT KK (SONY )

Inventor: CUTHBERT D S; NAKAMURA T; CUTHBERT S; CUTHBERT S D  
Number of Countries: 029 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200052640	A1	20000908	WO 2000JP1048	A	20000224	200108 B
AU 200026908	A	20000921	AU 200026908	A	20000224	200108
JP 2000251090	A	20000914	JP 9953397	A	19990301	200108
EP 1157359	A1	20011128	EP 2000905303	A	20000224	200201
			WO 2000JP1048	A	20000224	
BR 200010369	A	20011226	BR 200010369	A	20000224	200206
			WO 2000JP1048	A	20000224	

Priority Applications (No Type Date): JP 9953397 A 19990301

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200052640	A1	E	58	G06T-003/40	
Designated States (National): AU BR CA CN JP KR MX NZ RU SG					
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE					
AU 200026908	A			G06T-003/40	Based on patent WO 200052640
JP 2000251090	A		16	G06T-015/00	
EP 1157359	A1	E		G06T-003/40	Based on patent WO 200052640
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE					
BR 200010369	A			G06T-015/00	Based on patent WO 200052640

Image rendering apparatus for entertainment system e.g. TV game system,  
has image generating device which produces image in out -of- focus  
state by using original image in just-in-focus state

Abstract (Basic):

... An image generating device produces an image in an out -of-  
focus state by using an original image in a just-in-focus state. The  
original image is sequentially reduced and magnified.

... a) an image generating method...

...b) a depth-of-field displaying method...

...Enables showing the depth of field in order to display sense of  
distance from viewpoint to objects on a two-dimensional...

...The figure shows the explanatory drawing of the usage of bilinear  
filters for sequentially reducing and magnifying images .

Title Terms: IMAGE ;  
?

37/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

06301158 \*\*Image available\*\*  
METHOD AND DEVICE FOR THREE-DIMENSIONAL PLOTTING

PUB. NO.: 11-242753 [JP 11242753 A]  
PUBLISHED: September 07, 1999 (19990907)  
INVENTOR(s): ANDO KENJI  
GOTO MASAHIRO  
APPLICANT(s): HITACHI LTD  
APPL. NO.: 10-043362 [JP 9843362]  
FILED: February 25, 1998 (19980225)

#### ABSTRACT

PROBLEM TO BE SOLVED: To automatically provide out-of-focus display by repeating processing which equally divides luminance value to neighborhood pixels corresponding to a copy position calculated in accordance with the deviation between the Z value of a pixel and the depth of field.

SOLUTION: The coordinate and luminance of a pixel are received, the luminance is made into 1/4, the absolute value D1 of finite difference between Zf value of a corresponding image which is preliminarily set to a depth of field register and the Z value of the pixel is calculated, copy pixel distance D2 having a non-linear characteristic to deviation D1 is calculated by using a...

...arctan and a result is made an integer (S101 to 103). The coordinates of neighborhood pixels are calculated according to the coordinate and the D2 and if the vertex accumulation bit of a pixel held on a frame memory being 1 is decided (S104 and 105). The luminance of a received pixel is added to the luminance of the neighborhood pixels and luminance value is written to a copy destination pixel (S108). Furthermore, the processing is continued until the processing of all of the neighborhood pixels is finished to the received pixel (S109).

COPYRIGHT: (C)1999,JPO

37/3,K/2 (Item 2 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2002 JPO & JAPIO. All rts. reserv.

05791158 \*\*Image available\*\*  
**IMAGE** PROCESSING METHOD AND DEVICE THEREFOR

PUB. NO.: 10-074258 [JP 10074258 A]  
PUBLISHED: March 17, 1998 (19980317)  
INVENTOR(s): MIURA TAKASHI  
GOTO HIDEMUTSU  
APPLICANT(s): HUDSON SOFT CO LTD [488378] (A Japanese Company or Corporation); JP (Japan)  
APPL. NO.: 08-246925 [JP 96246925]  
FILED: August 30, 1996 (19960830)

**IMAGE** PROCESSING METHOD AND DEVICE THEREFOR

#### ABSTRACT

...SOLUTION: The image data is processed by the digital low-pass filter provided with the cut-off frequency...

... is a transfer function, is a function of the distance information, that is of a ( z ) value . Thus, by relating the ( z ) value and a coefficient (k), blurring corresponding to distance is expressed. In such a manner, by operating a highest frequency included in image data, the effect of being out of focus is expressed. Then, by approximating the



vision characteristics of a human by the digital filter...